

SYSTEM IMPACT STUDY

OASIS Request No: 77502760

ICTT-2012-120

Prepared for:

Entergy Services (SPO)

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1. EXECUTIVE SUMMARY

Entergy Services (SPO) has requested this study to determine the availability of 520 MW of monthly network transmission service transfer across Entergy's transmission system from 5/1/2018 to 7/1/2018. The transfer is from EES to EES. This report identifies limitations to the requested transfer, if any, along with the requirements and planning estimates to remedy these limitations.

2. STUDY METHOD

The study was performed on the latest available 2018 summer peak seasonal models using PSS/E and MUST software by Power Technologies Incorporated (PTI).

2.1 Data Inputs

- Non-confirmed firm transmission reservations with OASIS numbers prior to this request, which are in the study mode, were also modeled.
- A TRM value that effectively reduced line ratings by 5% was used in the seasonal peak model and 0% TRM used in the monthly model.
- Generation and load in EES was scaled to accommodate the transfer.

2.2 Base Case Modifications

- Entergy load was scaled to reflect the latest load forecast.
- Entergy generation was dispatched according to the most recent economic dispatch data.
- Confirmed firm transmission reservations were modeled for the years 2018.

Note: In real-time operations, the dynamic nature of these factors may affect the transfer capability as reported in this study.

2.3 Study Criteria

A separate analysis was performed based on the following four (4) study criteria:

2.3.1 Study Criteria 1

- With prior transaction currently in study mode
- With rollovers from existing long term transactions
- With existing confirmed transactions

2.3.2 Study Criteria 2

- With rollovers from existing long term transactions
- With existing confirmed transactions

2.3.3 Study Criteria 3

- With prior transaction currently in study mode
- With rollovers from existing long term transactions
- With existing confirmed transactions
- With approved construction plan upgrades

2.3.4 Study Criteria 4

- With rollovers from existing long term transactions
- With existing confirmed transactions
- With approved construction plan upgrades

2.4 Dependencies

The Available Transfer Capacity (ATC) depends on the following:

- system load
- generation dispatch
- scheduled maintenance of equipment
- configuration of the interconnected system
- power flows in effect among the interconnected systems
- previously confirmed firm reservations on the interface

3. STUDY RESULTS

TABLE 1 – Study Results

OASIS Request	Period	Cases Used	Amount (MW)	ATC Available	Rollover Rights Available
77502760	5/1/2018 – 7/1/2018	2018 Summer Peak	520	NO	N/A

3.1 Criteria 1 Results

Limitations to transfer are shown in Table 2 along with the remediation requirements.

TABLE 2 – Limitations to Transfer

Limiting Element	Required Upgrade / MW Impact	Upgrade Estimate
Tezcuco - Waterford 230kV	Upgrade Transmission Line – 13.05 miles	\$18,087,300
Hartburg - Inland Orange 230kV - Supplemental Upgrade	Supplemental Upgrade / 18 MW Impact	\$366,093 ⁺
TOTAL COST:		\$18,453,393*

*Note: The costs identified above are estimates, but do not include an additional +/- 30% for tax gross up, which may be applicable should the customer elect to proceed with the upgrades.

+Financial Payment calculation is based upon most recent construction cost estimates. The cost associated with the identified limiting element has been finalized.

ATC is not available. The elements identified need to be upgraded. The costs of the newly identified upgrades in the table above that do not have a Base Plan or Supplemental classification are based on planning estimates and will be further detailed if the customer elects to proceed to Facilities Study. However, the costs of the upgrades identified as Supplemental Upgrades are based on the best estimates available as of the date of this study. For more information regarding financial payment obligations for use of previously funded Supplemental Upgrades, see Section 4.3.5 of Attachment T of Entergy's OATT. To the extent that newly identified upgrades listed in the table above may be classified as Supplemental Upgrades, refer to Section 2.2 of Attachment T for eligibility for financial right payments. Detailed cost estimates and solutions for the limiting elements will be provided in the Facilities Study. The results of the Facilities Study may be different depending on prior OASIS requests that progress to the Facilities Study phase, as well as identified system upgrade changes to the transmission system.

3.2 Criteria 2 Results

Limitations to transfer are shown in Table 3 along with the remediation requirements.

TABLE 3 – Limitations to Transfer

Limiting Element	Required Upgrade / MW Impact	Upgrade Estimate
Tezcuco - Waterford 230kV	Upgrade Transmission Line – 13.05 miles	\$18,087,300
Vacherie - Waterford 230kV	Upgrade Transmission Line – 18.39 miles	\$25,488,540
TOTAL COST:		\$43,575,840*

*Note: The costs identified above are estimates, but do not include an additional +/- 30% for tax gross up, which may be applicable should the customer elect to proceed with the upgrades.

ATC is not available. The elements identified need to be upgraded. The costs of the newly identified upgrades in the table above that do not have a Base Plan or Supplemental classification are based on planning estimates and will be further detailed if the customer elects to proceed to Facilities Study. Detailed cost estimates and solutions for the limiting elements will be provided in the Facilities Study. The results of the Facilities Study may be different depending on prior OASIS requests that progress to the Facilities Study phase, as well as identified system upgrade changes to the transmission system.

3.3 Criteria 3 Results

Limitations to transfer are shown in Table 4 along with the remediation requirements.

TABLE 4 – Limitations to Transfer

Limiting Element	Required Upgrade / MW Impact	Upgrade Estimate
Tezcuco - Waterford 230kV	Upgrade Transmission Line – 13.05 miles	\$18,087,300
TOTAL COST:		\$18,087,300*

*Note: The costs identified above are estimates, but do not include an additional +/- 30% for tax gross up, which may be applicable should the customer elect to proceed with the upgrades.

ATC is not available. The elements identified need to be upgraded. The costs of the newly identified upgrades in the table above that do not have a Base Plan or Supplemental classification are based on planning estimates and will be further detailed if the customer elects to proceed to Facilities Study. Detailed cost estimates and solutions for the limiting elements will be provided in the Facilities Study. The results of the Facilities Study may be different depending on prior OASIS requests that progress to the Facilities Study phase, as well as identified system upgrade changes to the transmission system.

3.4 Criteria 4 Results

Limitations to transfer are shown in Table 5 along with the remediation requirements.

TABLE 5 – Limitations to Transfer

Limiting Element	Required Upgrade / MW Impact	Upgrade Estimate
Tezcucu - Waterford 230kV	Upgrade Transmission Line – 13.05 miles	\$18,087,300
Vacherie - Waterford 230kV	Upgrade Transmission Line – 18.39 miles	\$25,488,540
TOTAL COST:		\$43,575,840*

*Note: The costs identified above are estimates, but do not include an additional +/- 30% for tax gross up, which may be applicable should the customer elect to proceed with the upgrades.

ATC is not available. The elements identified need to be upgraded. The costs of the newly identified upgrades in the table above that do not have a Base Plan or Supplemental classification are based on planning estimates and will be further detailed if the customer elects to proceed to Facilities Study. Detailed cost estimates and solutions for the limiting elements will be provided in the Facilities Study. The results of the Facilities Study may be different depending on prior OASIS requests that progress to the Facilities Study phase, as well as identified system upgrade changes to the transmission system.

4. STUDY DATA

For items marked with an “*” in the ATC (MW) column in Tables 6-9, note that the negative ATC values shown are the result of the process to assess FFRs, and are not actual negative ATC values.

TABLE 6 – Detailed Results - Study Criteria 1

Year	Limiting Element	Contingency Element	ATC (MW)
5/1/2018 - 7/1/2018	Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	-256
	Tezcucu - Waterford 230kV	Waterford - Willow Glen 500kV	177
	Tezcucu - Waterford 230kV	Waterford 500/230kV transformer	177
	Tezcucu - Waterford 230kV	Belle Point - Tezcucu 230kV	185
	Hartburg - Inland Orange 230kV - Supplemental Upgrade	Cypress - Hartburg 500kV	276
	Tezcucu - Waterford 230kV	A.A.C. Corp - St Gabriel 230kV	286
	Tezcucu - Waterford 230kV	A.A.C. Corp - Licar 230kV	293
	Tezcucu - Waterford 230kV	Belle Helene - Licar 230kV	317
	Tezcucu - Waterford 230kV	Vulchlor - Woodstock 230kV	416
	Tezcucu - Waterford 230kV	Belle Helene - Woodstock 230kV	421
	Tezcucu - Waterford 230kV	Coly 500/230kV transformer	435

TABLE 7 – Detailed Results - Study Criteria 2

Year	Limiting Element	Contingency Element	ATC (MW)
5/1/2018 - 7/1/2018	Tezcucu - Waterford 230kV	Belle Point - Gypsy 230kV	-321
	Tezcucu - Waterford 230kV	Belle Point - Tezcucu 230kV	119
	Tezcucu - Waterford 230kV	Waterford 500/230kV transformer	141
	Tezcucu - Waterford 230kV	Waterford - Willow Glen 500kV	141
	Tezcucu - Waterford 230kV	A.A.C. Corp - St Gabriel 230kV	330
	Tezcucu - Waterford 230kV	A.A.C. Corp - Licar 230kV	337
	Tezcucu - Waterford 230kV	Belle Helene - Licar 230kV	361
	Tezcucu - Waterford 230kV	Coly 500/230kV transformer	458
	Tezcucu - Waterford 230kV	Vulchlor - Woodstock 230kV	460
	Tezcucu - Waterford 230kV	Belle Helene - Woodstock 230kV	465
	Vacherie - Waterford 230kV	Raceland - Waterford 230kV	516

TABLE 8 – Detailed Results - Study Criteria 3

Year	Limiting Element	Contingency Element	ATC (MW)
5/1/2018	Tezcuco - Waterford 230kV	Waterford 500/230kV transformer	396
- 7/1/2018	Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	396

TABLE 9 – Detailed Results - Study Criteria 4

Year	Limiting Element	Contingency Element	ATC (MW)
5/1/2018	Tezcuco - Waterford 230kV	Waterford - Willow Glen 500kV	377
-	Tezcuco - Waterford 230kV	Waterford 500/230kV transformer	377
7/1/2018	Vacherie - Waterford 230kV	Raceland - Waterford 230kV	464

TABLE 10 – Confirmed Reservations

OASIS		PSE	MW	Begin	End
569011		Entergy Services, Inc. (EMO)	242	3/1/2000	1/1/2014
759196		Entergy Services, Inc. (EMO)	143	1/1/2001	1/1/2021
759294		East Texas Electric Cooperative	31	1/1/2001	1/1/2018
1096986		Tennessee Valley Authority	73	9/1/2003	9/1/2013
1099991	renewal	City Water & Light, Jonesboro	83	1/1/2010	1/1/2016
1099997	renewal	City Water & Light, Jonesboro	168	1/1/2010	1/1/2016
1105665		Entergy Services, Inc. (EMO)	236	2/1/2003	2/1/2016
1105666		Entergy Services, Inc. (EMO)	91	2/1/2003	2/1/2027
1105668		Entergy Services, Inc. (EMO)	77	2/1/2003	2/1/2027
1126821		Entergy Services, Inc. (EMO)	101	5/1/2004	5/1/2029
1151106		Entergy Services, Inc. (EMO)	20	6/1/2010	6/1/2013
1168061		Entergy Services, Inc. (EMO)	80	8/1/2004	2/1/2028
1168408		Entergy Services, Inc. (EMO)	247	8/1/2004	2/1/2028
1289686	undesignation	Entergy Services, Inc. (EMO)	1	6/1/2007	6/1/2030
1294132		Entergy Services, Inc. (EMO)	526	1/1/2006	1/1/2035
1309874	renewal	East Texas Electric Cooperative	75	1/1/2009	1/1/2017
1309875	renewal	East Texas Electric Cooperative	50	1/1/2009	1/1/2017
1309876	renewal	East Texas Electric Cooperative	50	1/1/2009	1/1/2017
1356328		Muni Energy Agcy of Miss	40	6/1/2010	6/1/2040
1373643		City of Conway	25	3/1/2010	3/1/2040
1375299		Louisiana Generating LLC	11	3/1/2006	3/1/2013
1375559		CLECO Power LLC (Gen)	675	12/1/2006	12/1/2016
1380484		Osceola Light & Power	9	9/1/2009	9/1/2039
1383852		Arkansas Electric Cooperative Corp.	550	1/1/2007	1/1/2017
1385158		NRG Power Marketing	13	10/1/2007	10/1/2027
1387272		CLECO Power LLC (Gen)	11	4/1/2006	4/1/2016
1422708	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2007	1/1/2027
1425495		East Texas Electric Cooperative	50	3/1/2010	3/1/2045
1442453		NRG Power Marketing	320	6/1/2007	6/1/2026
1449495		Entergy Services, Inc. (EMO)	322	6/1/2009	6/1/2059
1456636		CLECO Power Marketing	10	10/1/2007	10/1/2012
1460876		Aquila Networks-MPS	75	3/1/2009	3/1/2029
1460878		Aquila Networks-MPS	75	3/1/2009	3/1/2029
1460879		Aquila Networks-MPS	75	3/1/2009	3/1/2029
1460881		Aquila Networks-MPS	75	3/1/2009	3/1/2029
1460898		Louisiana Energy & Power Authority	3	1/1/2009	1/1/2030
1460899		Louisiana Energy & Power Authority	5	1/1/2009	1/1/2030
1461442		Louisiana Energy & Power Authority	12	1/1/2009	1/1/2030
1464028		East Texas Electric Cooperative	168	1/1/2010	1/1/2040
1470484		City of West Memphis	20	1/1/2011	1/1/2041
1470811		East Texas Electric Cooperative	186	1/1/2010	1/1/2040
1477069		Entergy Services, Inc. (EMO)	10	11/1/2007	11/1/2037

OASIS		PSE	MW	Begin	End
1480164		Entergy Services, Inc. (EMO)	725	1/1/2005	9/1/2033
1495910		Southwestern Electric	78	5/1/2010	5/1/2013
1498122		Constellation Energy Commodities Grp.	30	4/1/2012	4/1/2042
1498129		City of Conway	50	4/1/2012	4/1/2042
1499610		NRG Power Marketing	300	1/1/2008	1/1/2013
1500582	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2008	1/1/2038
1500584	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2008	1/1/2038
1514102		East Texas Electric Cooperative	29	1/1/2008	1/1/2017
1514104		East Texas Electric Cooperative	35	1/1/2008	1/1/2017
1514105		East Texas Electric Cooperative	1	1/1/2008	1/1/2017
1517005	renewal	NRG Power Marketing	103	1/1/2011	1/1/2026
1525820	renewal	NRG Power Marketing	3	7/1/2009	7/1/2014
1527816		MOPEP	6	10/1/2007	10/1/2012
1530287		Empire District Electric	50	3/1/2010	3/1/2030
1530288		Empire District Electric	50	3/1/2010	3/1/2030
1546108	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2011	1/1/2051
1552148	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2009	1/1/2014
1555717	undesignation	East Texas Electric Cooperative	1	1/1/2010	1/1/2015
1555718		Entergy Services, Inc. (EMO)	158	1/1/2010	1/1/2015
1557220	undesignation	Entergy Services, Inc. (EMO)	1	7/1/2009	7/1/2018
1557221		Entergy Services, Inc. (EMO)	520	7/1/2009	7/1/2018
1557602	undesignation	East Texas Electric Cooperative	1	1/1/2009	1/1/2017
1564001	renewal	Louisiana Energy & Power Authority	6	4/1/2009	4/1/2014
1564356	renewal	NRG Power Marketing	5	9/1/2009	9/1/2025
1566302		NRG Power Marketing	300	1/1/2008	1/1/2013
1585225	renewal	City of Prescott	22	4/1/2009	4/1/2039
1585239	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2009	1/1/2013
1585240	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2009	1/1/2013
1598022	renewal	NRG Power Marketing	103	7/1/2010	7/1/2015
1598291		Entergy Services, Inc. (EMO)	206	6/1/2012	6/1/2042
1598885	renewal	Morgan Stanley Commodities Group	102	1/1/2009	1/1/2014
1598886	renewal	Morgan Stanley Commodities Group	102	1/1/2009	1/1/2014
1601111		Constellation Energy Commodities Grp.	5	1/1/2010	1/1/2015
1615102	renewal	MidAmerican Energy, Inc.	50	1/1/2009	1/1/2014
1615103	renewal	MidAmerican Energy, Inc.	50	1/1/2009	1/1/2014
1615105	renewal	MidAmerican Energy, Inc.	50	1/1/2009	1/1/2014
1615108	renewal	MidAmerican Energy, Inc.	50	1/1/2009	1/1/2014
1629240	renewal	MidAmerican Energy, Inc.	7	3/1/2009	3/1/2014
1630065	renewal	NRG Power Marketing	40	1/1/2010	1/1/2015
1632265	undesignation	Merrill Lynch Commodities	1	4/1/2009	4/1/2014
1633701		NRG Power Marketing	20	1/1/2010	1/1/2019
1633702		NRG Power Marketing	20	1/1/2010	1/1/2016

OASIS		PSE	MW	Begin	End
1633703		NRG Power Marketing	20	1/1/2010	1/1/2016
1639337		Entergy Services, Inc. (EMO)	587	3/1/2009	1/1/2019
1639338		Entergy Services, Inc. (EMO)	103	3/1/2009	1/1/2019
1639339		Entergy Services, Inc. (EMO)	32	3/1/2009	1/1/2019
1639340		Entergy Services, Inc. (EMO)	122	3/1/2009	1/1/2019
1639341		Entergy Services, Inc. (EMO)	134	3/1/2009	1/1/2019
1640629		CLECO Power Marketing	58	5/1/2001	1/1/2021
1640630		CLECO Power Marketing	32	5/1/2001	1/1/2021
1643983	renewal	NRG Power Marketing	300	1/1/2010	1/1/2015
1643984	renewal	NRG Power Marketing	100	9/1/2010	9/1/2015
1644155		CLECO Power Marketing	9	4/1/2009	5/1/2016
1644215	renewal	NRG Power Marketing	83	1/1/2010	1/1/2025
1644908		CLECO Power Marketing	41	5/1/2009	5/1/2018
1648049	undesignation	Entergy Services, Inc. (EMO)	1	6/1/2010	6/1/2013
1648050		Entergy Services, Inc. (EMO)	100	6/1/2010	6/1/2013
1648591	undesignation	Entergy Services, Inc. (EMO)	1	6/1/2010	6/1/2012
1648592		Entergy Services, Inc. (EMO)	485	6/1/2010	6/1/2012
1655366		Missouri Joint Municipal Electric Utility Comm.	6	10/1/2009	10/1/2014
1658087	undesignation	Entergy Services, Inc. (EMO)	1	6/1/2012	6/1/2042
1658088		South Miss Electric Power Assoc.	21	6/1/2012	6/1/2042
1659388		NRG Power Marketing	25	1/1/2011	1/1/2016
1665288		Merrill Lynch Commodities	15	1/1/2011	1/1/2012
1665492	renewal	Merrill Lynch Commodities	16	11/1/2009	11/1/2014
1665493	renewal	Merrill Lynch Commodities	4	11/1/2009	11/1/2014
1665899		Ameren Energy, Inc.	75	9/1/2009	9/1/2014
1668165		Entergy Services, Inc. (SPO)	600	1/1/2013	1/1/2043
1669126	renewal	Cargill Power Markets, LLC	103	1/1/2011	1/1/2016
1669127	renewal	Cargill Power Markets, LLC	103	1/1/2011	1/1/2016
1676674		NRG Power Marketing	100	1/1/2011	1/1/2020
1676675		NRG Power Marketing	100	1/1/2011	1/1/2020
1677749	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2013	1/1/2015
1679179	renewal	NRG Power Marketing	100	1/1/2011	1/1/2016
1679181	renewal	NRG Power Marketing	100	1/1/2011	1/1/2016
1685869	renewal	Muni Energy Agcy of Miss	19	1/1/2010	1/1/2018
1689499		Missouri Joint Municipal Electric Utility Comm.	3	9/1/2009	9/1/2014
1690613		NRG Power Marketing	25	1/1/2011	1/1/2016
1694305		Entergy Services, Inc. (EMO)	15	5/1/2010	5/1/2020
1694306		Entergy Services, Inc. (EMO)	30	5/1/2010	5/1/2020
73454527		Hope Water & Light	10	10/1/2009	10/1/2032
73457918		South Miss Electric Power Assoc.	180	10/1/2009	10/1/2014
73573797	renewal	American Electric Power	45	1/1/2011	1/1/2029

OASIS		PSE	MW	Begin	End
73586299	renewal	American Electric Power	6	1/1/2011	1/1/2029
73595626		NRG Power Marketing	13	1/1/2012	1/1/2017
73724303		Arkansas Electric Cooperative Corp.	104	1/1/2010	1/1/2015
73741113	renewal	Entergy Services, Inc. (EMO)	150	5/1/2010	5/1/2020
73741122	renewal	Entergy Services, Inc. (EMO)	135	5/1/2010	5/1/2020
73820650		MOWR	5	3/1/2010	3/1/2040
73884547		MOWR	35	8/1/2010	8/1/2040
73884558		MOWR	40	8/1/2010	8/1/2040
73942862	renewal	Muni Energy Agcy of Miss	13	6/1/2010	6/1/2015
73970673		Cargill Power Markets, LLC	40	1/1/2011	1/1/2016
73987480		South Miss Electric Power Assoc.	100	5/1/2010	5/1/2040
73987507		South Miss Electric Power Assoc.	180	6/1/2010	6/1/2015
73990804		South Miss Electric Power Assoc.	100	5/1/2010	5/1/2040
74001787		NRG Power Marketing	100	1/1/2011	1/1/2016
74001895		NRG Power Marketing	100	1/1/2011	1/1/2016
74001897		NRG Power Marketing	22	1/1/2011	1/1/2016
74001904		NRG Power Marketing	28	1/1/2011	1/1/2016
74001930		NRG Power Marketing	42	8/1/2006	8/1/2036
74001931		NRG Power Marketing	60	3/1/2010	3/1/2040
74001934		NRG Power Marketing	60	4/1/2012	4/1/2042
74233619	deferral	WRGS	15	4/1/2012	4/1/2017
74233670	undesignation	Entergy Services, Inc. (EMO)	1	8/1/2012	1/1/2038
74236787		NRG Power Marketing	75	6/1/2012	6/1/2017
74236794		NRG Power Marketing	100	6/1/2012	6/1/2017
74236798		NRG Power Marketing	100	6/1/2012	6/1/2017
74305315		NRG Power Marketing	10	1/1/2014	1/1/2017
74305339		NRG Power Marketing	10	1/1/2013	1/1/2023
74356639		NRG Power Marketing	103	1/1/2011	1/1/2016
74356652		NRG Power Marketing	206	6/1/2012	6/1/2017
74356666		NRG Power Marketing	50	1/1/2013	1/1/2014
74370625		Entergy Services, Inc. (EMO)	10	7/1/2010	7/1/2012
74408208	renewal	Louisiana Energy & Power Authority	45	9/1/2010	9/1/2015
74408225	renewal	Louisiana Energy & Power Authority	45	9/1/2010	9/1/2015
74514903		Entergy Services, Inc. (EMO)	20	6/1/2013	6/1/2029
74514911		Entergy Services, Inc. (EMO)	101	6/1/2013	6/1/2029
74691007		NRG Power Marketing	10/60	1/1/2013	1/1/2018
74728415		Brazos Electric Coop	100	1/1/2012	1/1/2017
74758974	deferral	Entergy Services, Inc. (EMO)	804	5/1/2013	5/1/2058
74777205	renewal	NRG Power Marketing	300	1/1/2013	1/1/2033
74777208	renewal	NRG Power Marketing	300	1/1/2015	1/1/2035
74789476	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2012	1/1/2016
74829975	renewal	CLECO Power LLC (Gen)	35	1/1/2011	1/1/2016
74835023		American Electric Power	103	1/1/2012	1/1/2017

OASIS		PSE	MW	Begin	End
74881866	renewal	NRG Power Marketing	8	3/1/2011	3/1/2021
74899933		Entergy Services, Inc. (EMO)	322	5/1/2013	2/1/2041
74899954	undesignation	Entergy Services, Inc. (EMO)	1	2/1/2012	2/1/2014
74899956		Entergy Services, Inc. (EMO)	100	2/1/2012	2/1/2014
74899968	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2013	1/1/2015
74899969	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2012	1/1/2015
74899972	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2015	1/1/2045
74899974	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2015	1/1/2045
74899976	undesignation	Entergy Services, Inc. (EMO)	1	1/1/2015	1/1/2045
74899980		Entergy Services, Inc. (EMO)	570	1/1/2015	1/1/2045
74899988	undesignation	Entergy Services, Inc. (EMO)	1	6/1/2012	6/1/2022
74899989		Entergy Services, Inc. (EMO)	485	6/1/2012	6/1/2022
74901827	undesignation	Entergy Services, Inc. (EMO)	1	2/1/2011	2/1/2041
74958042		NRG Power Marketing	34	1/1/2006	1/1/2036
74958045		NRG Power Marketing	34	1/1/2006	1/1/2036
74958047		NRG Power Marketing	17	1/1/2006	1/1/2036
74958048		NRG Power Marketing	17	1/1/2006	1/1/2036
75207302	renewal	Entergy Services, Inc. (EMO)	1	7/1/2011	7/1/2016
75259845		SMEPA	2	4/1/2012	1/1/2040
75265640	renewal	South Miss Electric Power Assoc.	75	6/1/2011	6/1/2016
75299243		AECI	103	1/1/2012	1/1/2017
75342276		Cargill Power Markets	202	12/1/2012	12/1/2017
75342281		Cargill Power Markets	202	12/1/2012	12/1/2017
75460486		MOWR	20	4/1/2013	4/1/2037
75495258	renewal	NRG Power Marketing	13	1/1/2017	1/1/2019
75564309		ETEC	50	5/1/2014	5/1/2044
75826033		CLECO Power Marketing	600	4/1/2014	4/1/2033
75831107		Muni Energy Agcy of Miss	20	6/1/2013	6/1/2041
76120007	renewal	CLECO Power Marketing	10	10/1/2012	10/1/2017
76234876	undesignation	Entergy Services (SPO)	1	6/1/2012	6/1/2042
76234879		Entergy Services (SPO)	194	6/1/2012	6/1/2042
76234889		Entergy Services (SPO)	256	1/1/2016	1/1/2043
76234897		Entergy Services (SPO)	35	1/1/2016	1/1/2043
76234922	undesignation	Entergy Services (SPO)	1	5/1/2013	5/1/2042
76234951		Entergy Services (SPO)	5	5/1/2013	5/1/2042
76238089		Entergy Services (SPO)	20	1/1/2014	1/1/2043
76280552	undesignation	Entergy Services, Inc. (EMO)	1	6/1/2012	6/1/2042
76280558	undesignation	Entergy Services, Inc. (EMO)	1	5/1/2013	5/1/2042
76449800		Arkansas Electric Cooperative Corp.	250	1/1/2012	1/1/2013
			275	1/1/2013	1/1/2014
			300	1/1/2014	1/1/2015
			320	1/1/2015	1/1/2017
76449828		Arkansas Electric Cooperative Corp.	78	1/1/2012	1/1/2013

OASIS		PSE	MW	Begin	End
			80	1/1/2013	1/1/2014
			82	1/1/2014	1/1/2015
			84	1/1/2015	1/1/2016
			86	1/1/2016	1/1/2017
76513126	undesignation	Constellation Energy Commodities Grp.	1	1/1/2012	1/1/2017
76513148	undesignation	Constellation Energy Commodities Grp.	1	1/1/2012	1/1/2017
76513215	renewal	EWOM	60	11/1/2009	11/1/2014
76513304	renewal	EWOM	60	11/1/2014	11/1/2019
76533177		EWOM	25	4/1/2009	4/1/2014
76533260	renewal	EWOM	25	4/1/2014	4/1/2019
76744580	deferral	South Miss Electric Power Assoc.	2	1/1/2013	1/1/2040
76583976		Arkansas Electric Cooperative Corp (AECC)	660	9/1/2012	9/1/2017
76583995		Arkansas Electric Cooperative Corp (AECC)	200	9/1/2012	9/1/2017
76767669		NRG Power Marketing	103	6/1/2013	6/1/2017
76794317	undesignation	NRG Power Marketing	1	1/1/2013	1/1/2025
76794321		NRG Power Marketing	10	1/1/2013	1/1/2025
76523750		SRMP	180	6/1/2012	6/1/2018
76523753		SRMP	30	6/1/2012	6/1/2016
76523754		EWOM	45	6/1/2012	6/1/2016
77025124		Entergy Services (SPO)	495	1/1/2014	1/1/2017
77347222		Entergy Services (SPO)	495	1/1/2017	6/1/2017

TABLE 11 - Pre-Order 888 Transactions

OASIS		PSE	MW	Begin	End
1332606		East Texas Electric Cooperative	55	1/1/2006	1/1/2017
1412156		Entergy Services, Inc. (EMO)	741	1/1/2007	1/1/2038
1412158		Entergy Services, Inc. (EMO)	1867	1/1/2007	1/1/2038
1412160		Entergy Services, Inc. (EMO)	1142	1/1/2007	1/1/2038
1412161		Entergy Services, Inc. (EMO)	59	1/1/2007	1/1/2038
1412162		Entergy Services, Inc. (EMO)	148	1/1/2007	1/1/2038
1412164		Entergy Services, Inc. (EMO)	1157	1/1/2007	1/1/2038
1412165		Entergy Services, Inc. (EMO)	1219	1/1/2007	1/1/2038
1412166		Entergy Services, Inc. (EMO)	683	1/1/2007	1/1/2038
1412167		Entergy Services, Inc. (EMO)	140	1/1/2007	1/1/2038
1412168		Entergy Services, Inc. (EMO)	456	1/1/2007	1/1/2038
1412169		Entergy Services, Inc. (EMO)	739	1/1/2007	1/1/2038
1412171		Entergy Services, Inc. (EMO)	64	1/1/2007	1/1/2038
1412172		Entergy Services, Inc. (EMO)	870	1/1/2007	1/1/2038
1412173		Entergy Services, Inc. (EMO)	129	1/1/2007	1/1/2038
1412175		Entergy Services, Inc. (EMO)	130	1/1/2007	1/1/2038
1412176		Entergy Services, Inc. (EMO)	65	1/1/2007	1/1/2038
1412178		Entergy Services, Inc. (EMO)	61	1/1/2007	1/1/2038
1412179		Entergy Services, Inc. (EMO)	304	1/1/2007	1/1/2038
1412181		Entergy Services, Inc. (EMO)	692	1/1/2007	1/1/2038
1412183		Entergy Services, Inc. (EMO)	433	1/1/2007	1/1/2038
1412184		Entergy Services, Inc. (EMO)	1946	1/1/2007	1/1/2038
1412185		Entergy Services, Inc. (EMO)	946	1/1/2007	1/1/2038
1498278		Entergy Services, Inc. (EMO)	75	8/1/2007	1/1/2017
1498281		Entergy Services, Inc. (EMO)	86	8/1/2007	1/1/2017
1498283		Entergy Services, Inc. (EMO)	68	8/1/2007	1/1/2017
1498284		Entergy Services, Inc. (EMO)	78	8/1/2007	1/1/2017
1498285		Entergy Services, Inc. (EMO)	11	8/1/2007	1/1/2044
1498286		Entergy Services, Inc. (EMO)	69	8/1/2007	1/1/2044
1498287		Entergy Services, Inc. (EMO)	14	8/1/2007	1/1/2044
1528114	Replaces 1412186	Entergy Services, Inc. (EMO)	1523	1/1/2008	1/1/2038
1528115	Replaces 1412177	Entergy Services, Inc. (EMO)	1039	1/1/2008	1/1/2038
1528116	Replaces 1412182	Entergy Services, Inc. (EMO)	1834	1/1/2008	1/1/2038
76120467	Renewal for 1412178	Entergy Services, inc. (EMO)	61	1/1/2038	1/1/2045
76120472	Renewal for 1412172	Entergy Services, inc. (EMO)	870	1/1/2038	1/1/2045
76120479	Replaces 1412155	Entergy Services, Inc. (EMO)	1738	1/1/2012	1/1/2045
76234797	Renewal for 1412163	Entergy Services, Inc. (EMO)	194	1/1/2038	1/1/2043
76234817	Renewal for 1412174	Entergy Services, Inc. (EMO)	140	1/1/2038	1/1/2043



OASIS		PSE	MW	Begin	End
76234827	Renewal for 1412170	Entergy Services, Inc. (EMO)	183	1/1/2038	1/1/2043
76234836	Renewal for 1412180	Entergy Services, Inc. (EMO)	351	1/1/2038	1/1/2043
76292988	Replaces 1412163	Entergy Services, Inc. (EMO)	190	1/1/2012	1/1/2043
76292990	Replaces 1412174	Entergy Services, Inc. (EMO)	144	1/1/2012	1/1/2043
76292992	Replaces 1412170	Entergy Services, Inc. (EMO)	210	1/1/2012	1/1/2043
76292993	Replaces 1412180	Entergy Services, Inc. (EMO)	324	1/1/2012	1/1/2043
76528782		Constellation Energy Commodities Grp	5	7/1/1998	7/1/2027

TABLE 12 - Study Queue

OASIS		PSE	MW	Begin	End
74846159		AEPM	65	1/1/2015	1/1/2020
75206836		ETEC	125	1/1/2015	1/1/2020
76744419		SMEPA	280	1/1/2014	1/1/2025
76794133	undesignation	NRG Power Marketing	1	1/1/2014	1/1/2022
76794134	undesignation	NRG Power Marketing	1	1/1/2014	1/1/2022
76794135	undesignation	NRG Power Marketing	1	1/1/2014	1/1/2022
76794138	undesignation	NRG Power Marketing	1	1/1/2014	1/1/2022
76794140		NRG Power Marketing	309	1/1/2014	1/1/2019
76794150	undesignation	NRG Power Marketing	1	1/1/2014	1/1/2019
76794151		NRG Power Marketing	309	1/1/2014	1/1/2019
76902738		CPWM	80	1/1/2013	1/1/2018
76975184		Entergy Services (SPO)	28	1/1/2013	1/1/2033
77025018		Entergy Services (SPO)	9	1/1/2013	1/1/2033
77176931		NRG Power Marketing	525	6/1/2014	6/1/2024
77272292		Entergy Services (SPO)	9	1/1/2013	1/1/2033
77272300		Entergy Services (SPO)	4	1/1/2013	1/1/2033
77289977	undesignation	NRG Power Marketing	1	6/1/2014	6/1/2024
77289995		NRG Power Marketing	309	6/1/2014	6/1/2024
77289999	undesignation	NRG Power Marketing	1	6/1/2014	6/1/2024
77290002		NRG Power Marketing	309	6/1/2014	6/1/2024
77355706		Horizon Wind	100	1/1/2015	1/1/2020
77378092		NRG Power Marketing	51	1/1/2015	1/1/2026
77382681		Entergy Services (SPO)	300	1/1/2017	6/1/2017
77494473		Arkansas Electric Cooperative (AECC)	660	9/1/2017	9/1/2037
77502748		Entergy Services (SPO)	4	1/1/2013	1/1/2043
77502759		Entergy Services (SPO)	520	5/1/2013	5/1/2018
SPP 74240998_1004_1007_1231_1265		AEP	20-116	1/1/2011	1/1/2020
SPP 76586568		ETEC	8	1/1/2013	1/1/2015
SPP 76586594		TEXL	20	1/1/2013	1/1/2015
SPP 76586584		NTEC	8/16	1/1/2013	1/1/2015