Proposed Procurement Methodology for Emergency Response Service

DSWG/QMWG Meeting

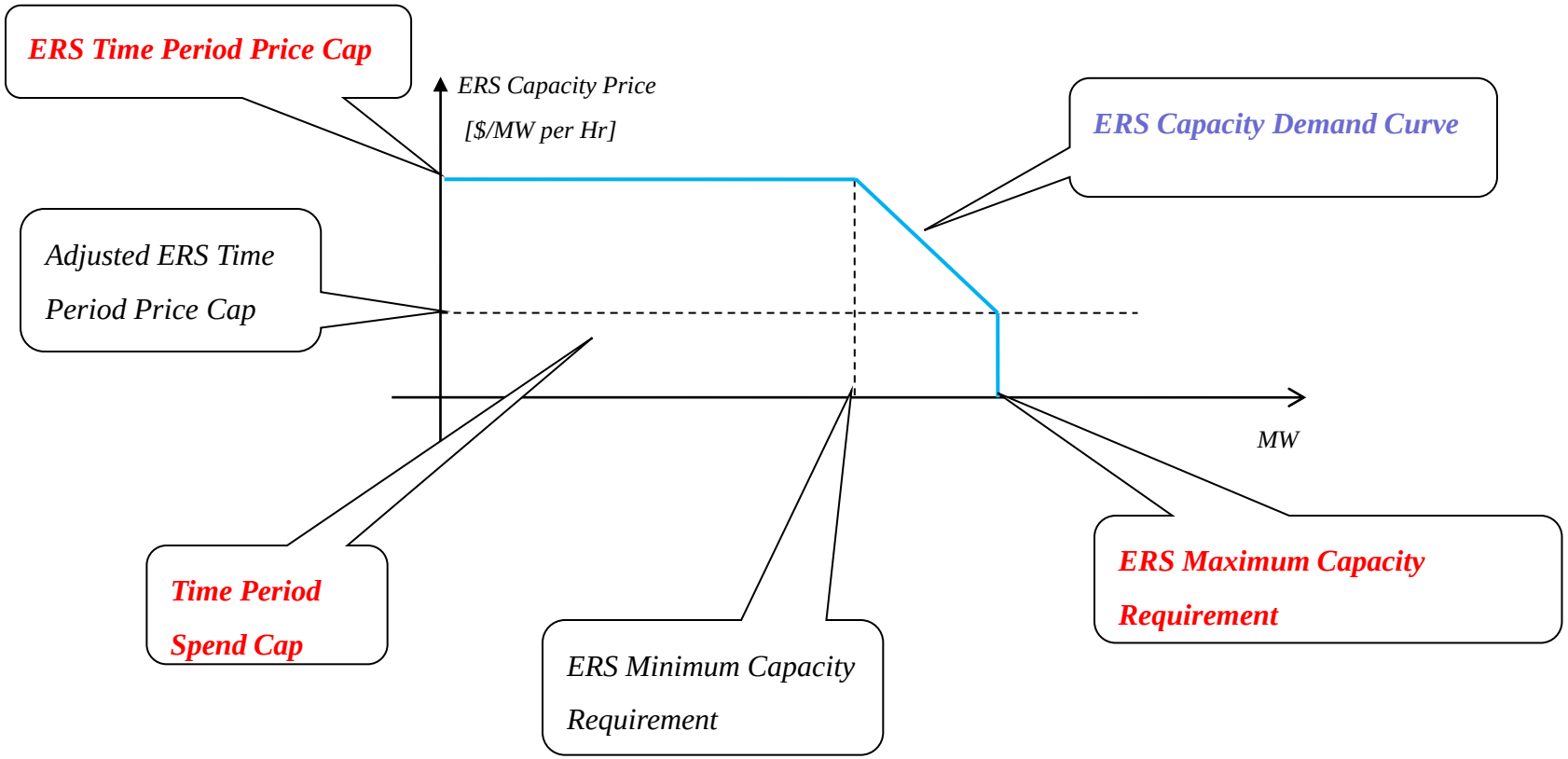
05/31/2013

Purpose for Revised Procurement Methodology

Methodology Proposed for the following:

- Remove as much of the subjectivity as possible from the current ERCOT procurement process
- Create a methodology that provides the appropriate price signals during higher risk time periods during the ERS contract year
- Establish known procurement parameters for ERS Providers
- This proposal is being developed with the intent that market clearing prices will apply for all ERS products

ERS Time period Capacity Demand Curve



ERS Time Period Price Cap Option

1. During contract terms and time periods when the TDSP Load Management Programs are available (currently BH2 and BH3 for the JunSep13 contract term) use the greater of cost caps set by the PUCT for the TDSP LM programs or the historical cost of Ancillary Services

2. During all other contract terms and time periods use historical cost of Ancillary Services
   - 10-Minute ramp ERS products use 3 year average for RRS
   - 30-Minute ramp ERS products use 3 year average for Non-Spin

Utilities Energy Efficiency Programs

- TDSP incentives for C&I Loads participating under the Load Management programs have been traditionally set at $40 per KW-year.[1]

- TDSP LM Programs are only available from 1-7 pm Monday through Friday during Jun-Sept (6 hours per day Mon-Fri = 504 hours for 2013)

- $40 per KW-year = $79.36/MW/hr.

Note: [1] From Commission response to Project No. 39674

Average prices of A/S for 2012 per ERS Time Period

Responsive Reserve Service
(Use for 10-Minute ERS)

	Feb - May			
	BH1	BH2	BH3	NBH
2010	7.79	7.73	12.56	8.73
2011	20.64	14.71	28.99	16.29
2012	6.48	16.29	24.23	6.53
Average	11.64	12.91	21.93	10.52

	Jun - Sep			
	BH1	BH2	BH3	NBH
2010	6.11	17.94	20.04	6.43
2011	6.68	175.45	143.01	12.40
2012	3.99	39.27	41.91	4.51
Average	5.59	77.55	68.32	7.78

	Oct - Jan			
	BH1	BH2	BH3	NBH
2010	7.77	6.13	13.08	8.61
2011	6.59	8.91	13.58	7.17
2012	6.82	8.79	13.49	7.35
Average	7.06	7.94	13.38	7.71

Non-Spinning Reserve service
(Use for 30-Minute ERS)

	Feb - May			
	BH1	BH2	BH3	NBH
2010	4.48	6.63	6.06	2.96
2011	15.66	11.46	19.84	10.16
2012	2.00	8.99	13.50	2.06
Average	7.38	9.03	13.13	5.06

	Jun - Sep			
	BH1	BH2	BH3	NBH
2010	1.42	14.27	16.07	2.73
2011	2.34	88.73	77.63	4.27
2012	1.03	19.76	21.41	1.44
Average	1.59	40.92	38.37	2.82

	Oct - Jan			
	BH1	BH2	BH3	NBH
2010	2.07	3.49	4.38	2.01
2011	1.67	5.18	5.98	1.70
2012	1.10	2.34	3.12	1.22
Average	1.61	3.67	4.50	1.64

Establishing ERS Time Period Max Capacity Requirements

ERS Time Period Capacity Requirements:

A. Using most current SARA determine ERS Capacity needed for "Capacity Available for Operating Reserves" (Extreme Load/Typical Generation Outages) + ERS Capacity = 2300 MWs, but not less than 500 MWs

B. If "Capacity Available for Operating Reserves" (extreme load/Typical Gen Outages) > 2300 use the following:
   - 500 MWs if Time Period is declared by ERCOT as on-peak time period
   - 0 MWs if declared as off-peak time period

	Time Period	On Pk/Off Pk	Cap. Req.
Feb-May	BH1	On	SARA/500
	BH2	On	SARA/500
	BH3	On	SARA/500
	NBH	On	SARA/500
Jun-Sep	BH1	Off	0
	BH2	On	SARA/500
	BH3	On	SARA/500
	NBH	Off	0
Oct-Jan	BH1	On	SARA/500
	BH2	Off	0
	BH3	Off	0
	NBH	On	SARA/500

SARA Releases

Release Dates:

MAR 1

MAY 1

SEP 1

Use Final Summer for Jun-Sep Contract Period

Use Worst case for Feb-May Contract period

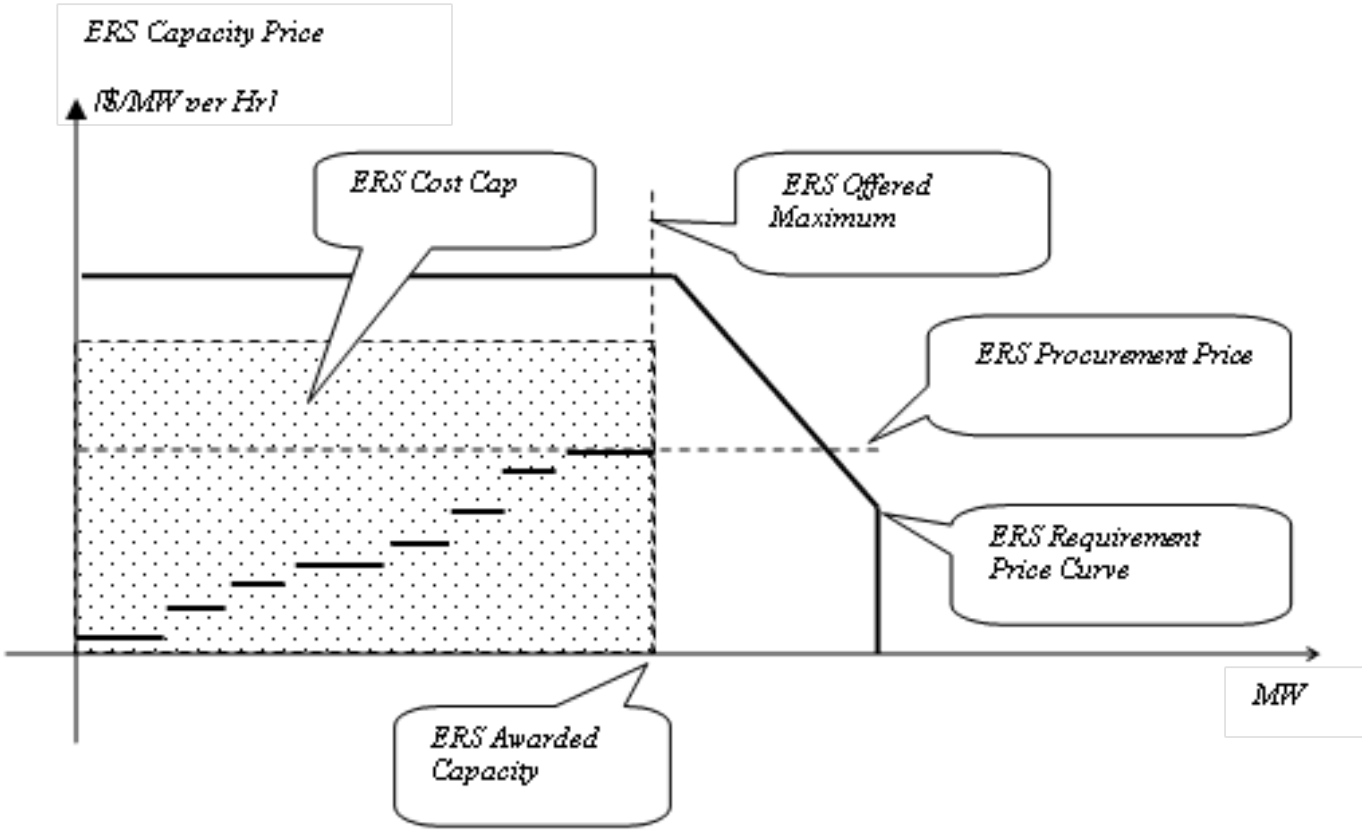
SARA	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SPR			**Final**								**Prelim**	
SUM			**Prelim**		**Final**							
FAL					**Prelim**				**Final**			
WIN									**Prelim**		**Final**	

Use Worst case for Oct-Jan Contract period

- **Release date of final SARA for upc preliminary SARA for the following season would be aligned**
- **Release date of final SARA for Summer and Winter seasons would be one month prior start of season (May 1 and November 1, respectively)**
- **This results in only four releases per year and sets those dates as March 1, May 1, September 1 and November 1**

Time Period Spend Constraint

Procurement for each time period will be constrained by a predefined maximum spend per ERS Time Period



Time Period Spend Constraint

- **Annual cost cap limit is set at $50 million per year**
- **Applying Spend Constraint**
  - Create initial time period ERS Procurement assessment prior to beginning of the ERS Budget year
  - Allocate $50 million across all time periods

		A	B	C	D	E	F
				Clearing			Time Period
	Time Period	Cap. Req.	Hrs/T.P.	Price			Spend Cap
Feb-May	BH1	500	430	$11.64	$2,502,600	0.0218	$1,091,602
	BH2	500	258	$12.91	$1,665,390	0.0145	$726,422
	BH3	500	344	$21.93	$3,771,960	0.0329	$1,645,280
	NBH	500	1871	$10.52	$9,841,460	0.0859	$4,292,718
Jun-Sep	BH1	0	420	$5.59	$0	0.0000	$0
	BH2	1883	252	$79.36	$37,657,590	0.3285	$16,425,757
	BH3	1883	336	$79.36	$50,210,120	0.4380	$21,901,009
	NBH	0	1920	$7.78	$0	0.0000	$0
Oct-Jan	BH1	500	420	$7.06	$1,482,600	0.0129	$646,691
	BH2	0	252	$7.94	$0	0.0000	$0
	BH3	0	336	$13.38	$0	0.0000	$0
	NBH	500	1945	$7.71	$7,497,975	0.0654	$3,270,520
					$114,629,694	1.0000	$50,000,000

A = ERS Time Period Max Cap. Req. from page 7

B = Hours in each ERS Time Period

C = ERS Time Period Price cap from pages 4-6

D = Spend based on Max cap @ price cap

E = Time Period Spend allocation; D/$114M

F = ERS Time Period Spend Constraint; E* $50M

Other

- Money not spent under the contract term cost cap will be added to next contract term within the same ERS budget year.
- Money not spent at the end of the last contract term in the ERS Budget year will not be carried forward into the next ERS budget year
- Only procure for renewal contract periods if money available
- Offers for each time period will be flagged as either 10-Minute or 30-Minute ERS offer
- Max offer cleared pertaining to 10-Minute flagged offer will set the clearing price for 10-Minute ERS
- Max offer cleared pertaining to 30-Minute flagged offer will set the clearing price for 30-Minute ERS

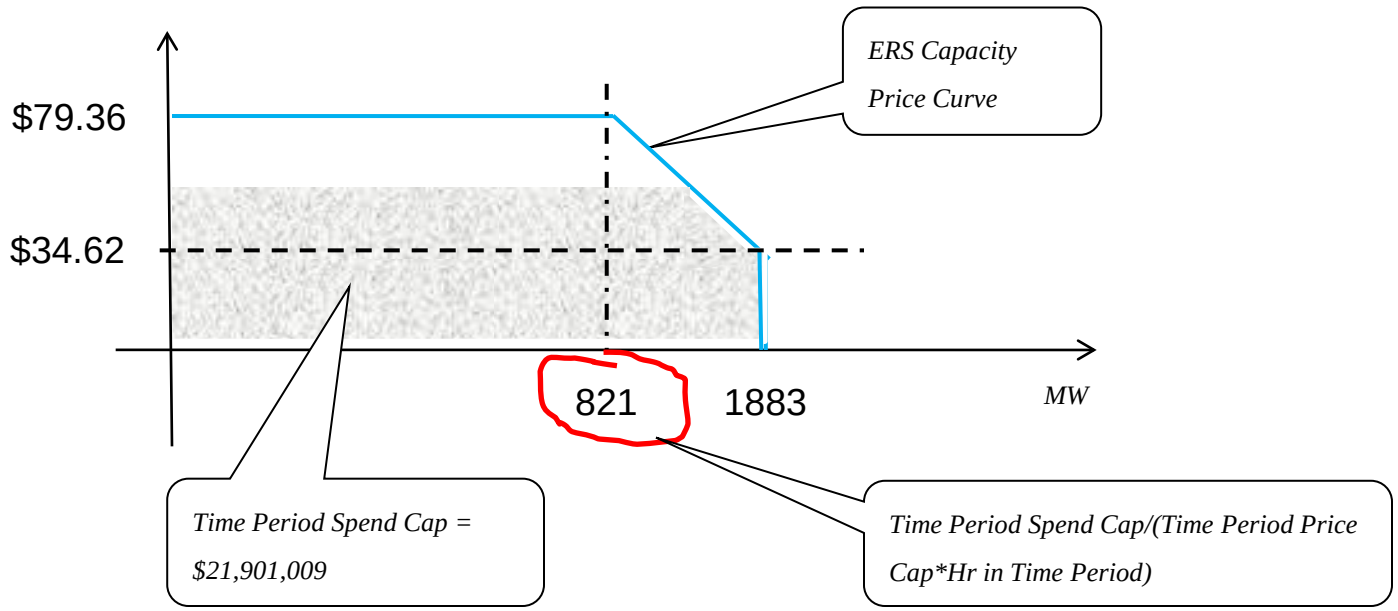
Weather Sensitive ERS & WEH Time Period

- **BH2 and BH3 Time Periods**
  - Weather Sensitive ERS will be procured under the BH2 and BH3 ERS Capacity Demand Curves for Jun-Sep SCT only

- **Weekend/Holiday Peak Time Period (WEH)**
  - Time Period Price cap = greater of TDSP LM program cost cap or 3 year average of NSRS for applicable hours
  - Max Capacity requirement = Declared an On peak time period where SARA or 500 MWs would apply
  - New Time Period added to Time Period Spend Constraint allocation table
  - All ERS products will be eligible to offer into WEH

Example ERS Capacity Demand Curve

Jun-Sep2013 BH3 ERS Capacity Demand Curve

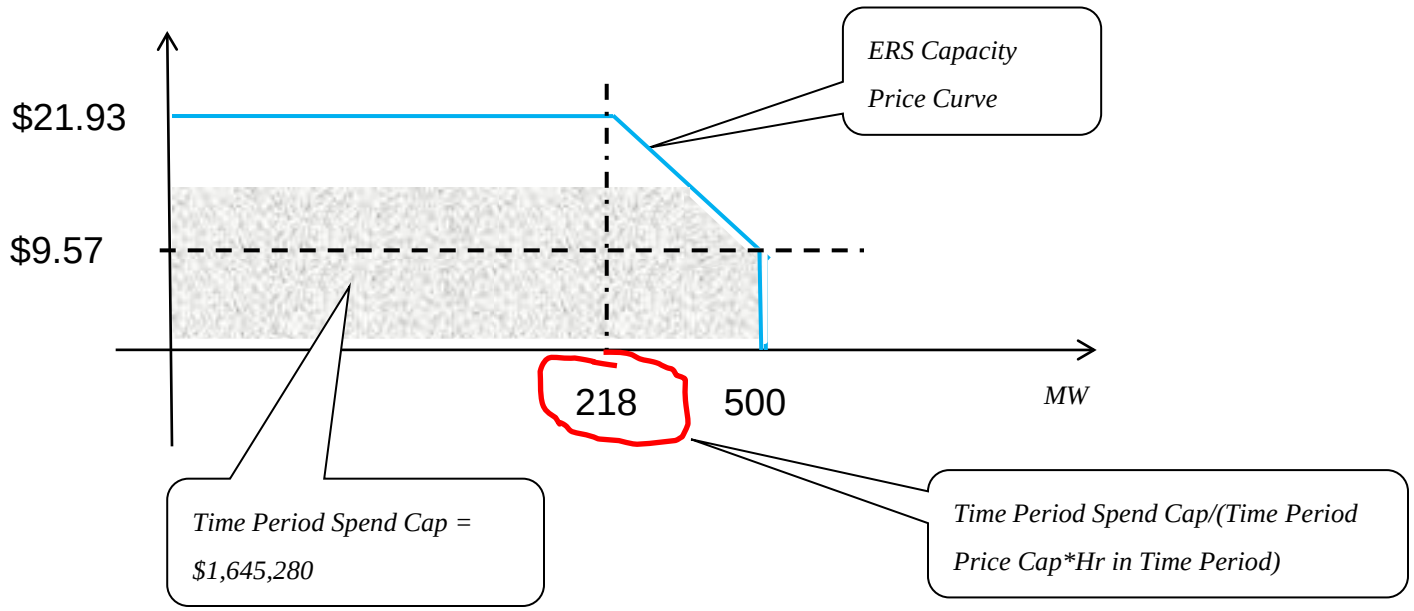


Notes:

1. All ERS Products will be procured using a common Capacity Demand Curve for each ERS Time Period.
2. Each Time Period Procurement is constrained by Time Period Spend Cap.
3. No minimum procurement capacity requirements

Example ERS Capacity Demand Curve

Feb-May2013 BH3 ERS Capacity Demand Curve



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2. Each Time Period Procurement is constrained by Time Period Spend Cap.
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