

Over-the-Counter (OTC) Training for Operating Reserve Market Participants

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Welcome - Agenda



- Quick review of OTC
- Review **new** OTC template
- Review **new** offer requirements
- Review offer & allocation rules
- Discuss email issues

What is OTC?



- The AESO procures operating reserve in 2 ways:
 - Watt-Ex
 - RR, SR, SUP by on-peak (HE 8-23) and off-peak (HE1-7 & 24)
 - Block volumes procured for all on-peak and for all off-peak hours
 - Equilibrium price (Average of the Bid Price and Clearing Price)
 - **OTC (over-the-counter contracts)**
 - RR, SR, SUP hourly volumes
 - Different volumes procured for each hour
 - Price as offered

OTC Volumes



ETS LOGIN >>

THE POWER OF POSSIBILITY

Reports

Current | Select Report: Volume Forecast | Select Format: html | OK

Historical | Current | Historical

Trading Page

Supply Forecast

Seven-day Forecast of Oper

(Forecast updated daily, by 9:00 am)

Date	HE	Active Regulating	Active Spinning	Active Supplem
09/08/2010	1	125	225	
09/08/2010	2	125	225	
09/08/2010	3	135	225	
09/08/2010	4	135	225	
09/08/2010	5	135	225	
09/08/2010	6	225	225	
09/08/2010	7	194	234	
09/08/2010	8	150	241	
09/08/2010	9	165	244	
09/08/2010	10	150	247	
09/08/2010	11	150	249	
09/08/2010	12	150	250	
09/08/2010	13	145	250	
09/08/2010	14	145	251	
09/08/2010	15	145	252	
09/08/2010	16	150	252	
09/08/2010	17	150	253	
09/08/2010	18	170	253	
09/08/2010	19	180	250	
09/08/2010	20	180	248	
09/08/2010	21	175	250	
09/08/2010	22	153	249	
09/08/2010	23	177	243	
09/08/2010	24	125	233	

HE	Forecast	Watt-Ex	OTC
HE8	241	241	0
HE9	244	241	3
HE10	247	241	6
HE11	249	241	8
HE12	250	241	9
HE13	250	241	9
HE14	251	241	10
HE15	252	241	11
HE16	252	241	11
HE17	253	241	12
HE18	253	241	12
HE19	250	241	9
HE20	248	241	7
HE21	250	241	9
HE22	249	241	8
HE23	243	241	2

Use of this site governed by these Terms

NEW OTC template – What's changed?



- Additional field for virtual unit substitution
 - Participant submits offer using VIR as unit ID
 - AESO notifies participant of any awarded volumes
 - Participant assigns an actual unit ID for the awarded volumes

Delivery Date	11-Aug
Type	ACTIVE
Product	RR
Price (PP +/- X)	\$0.00
Unit	ABC1
Seller	EXAMPLE
Substitution for Virtual Unit? (Y/N)	
HE1	10
HE2	10
HE3	10
HE4	10
HE5	10
HE6	10
HE7	10
HE8	10
HE9	10
HE10	10
HE11	10
HE12	10
HE13	10
HE14	10
HE15	10
HE16	10
HE17	10
HE18	10
HE19	10
HE20	10
HE21	10
HE22	10
HE23	10
HE24	10
Unit Max:	10
Product Max:	10
Product Min:	5

No (N): This is a new offer unrelated to a previously allocated virtual unit

Yes (Y): This unit is a substitution for a previously allocated virtual unit

Offering using an virtual unit...

1

Participant submits OTC offer

Delivery Date	11-Aug
Type	ACTIVE
Product	RR
Price (PP +/- X)	\$0.00
Unit	VIR
Seller	EXAMPLE
Substitution for Virtual Unit?	No
HE1	10
HE2	10
HE3	10
HE4	10
HE5	10
HE6	10
HE7	10
HE8	10
HE9	10
HE10	10
HE11	10
HE12	10
HE13	10
HE14	10
HE15	10
HE16	10
HE17	10
HE18	10
HE19	10
HE20	10
HE21	10
HE22	10
HE23	10
HE24	10
Unit Max:	10
Product Max:	10
Product Min:	0

2

Volume allocated

Delivery Date	11-Aug
Type	ACTIVE
Product	RR
Price (PP +/- X)	\$0.00
Unit	VIR
Seller	EXAMPLE
HE1	0
HE2	0
HE3	0
HE4	0
HE5	0
HE6	0
HE7	0
HE8	7
HE9	5
HE10	6
HE11	9
HE12	8
HE13	6
HE14	6
HE15	6
HE16	6
HE17	7
HE18	7
HE19	8
HE20	8
HE21	8
HE22	5
HE23	5
HE24	0
Unit Max:	10
Product Max:	10
Product Min:	0

3

Participant assigns 'actual' unit for awarded volumes

Delivery Date	11-Aug	11-Aug	11-Aug
Type	ACTIVE	ACTIVE	ACTIVE
Product	RR	RR	RR
Price (PP +/- X)	\$0.00	\$0.00	\$0.00
Unit	ABC1	ABC2	ABC3
Seller	EXAMPLE	EXAMPLE	EXAMPLE
Substitution for Virtual Unit?	Yes	Yes	Yes
HE1	0	0	0
HE2	0	0	0
HE3	0	0	0
HE4	0	0	0
HE5	0	0	0
HE6	0	0	0
HE7	0	0	0
HE8	2	2	3
HE9	5	0	0
HE10	3	3	0
HE11	3	3	3
HE12	4	4	0
HE13	2	2	2
HE14	6	0	0
HE15	2	2	2
HE16	2	2	2
HE17	5	2	0
HE18	5	2	0
HE19	4	4	0
HE20	0	8	0
HE21	0	0	8
HE22	3	2	0
HE23	0	0	5
HE24	0	0	0
Unit Max:	10	10	10
Product Max:	10	10	10
Product Min:	0	0	0

Offering on a virtual unit



- Virtual substitutions must be sent to the AESO within:
 - 30mins – weekday
 - 45mins – weekend/holiday

Offering using an 'Actual' unit...

Delivery Date	11-Aug
Type	ACTIVE
Product	RR
Price (PP +/- X)	\$0.00
Unit	ABC1
Seller	EXAMPLE
Substitution for Virtual Unit?	No
HE1	10
HE2	10
HE3	10
HE4	10
HE5	10
HE6	10
HE7	10
HE8	10
HE9	10
HE10	10
HE11	10
HE12	10
HE13	10
HE14	10
HE15	10
HE16	10
HE17	10
HE18	10
HE19	10
HE20	10
HE21	10
HE22	10
HE23	10
HE24	10
Unit Max:	10
Product Max:	10
Product Min:	0

If offering with an 'actual' unit ID then the substitution field must be 'No'



NEW offer requirements



- Participants must offer the same volume in each hour (on-peak or off-peak)
 - Hourly profiles will not be accepted
 - Offers that do not comply will not be considered
- Product minimum can only be 0MW or 5MW
 - Offers that contain minimums greater than 5MW will not be considered
- Comments will no longer be considered
 - therefore specific offer conditions will not be accepted
 - separate offers must be submitted to reflect conditions

Same volume must be offered in every hour – by on-peak or off-peak

Required Volumes

08-11-2010	HE	RR	SR	SUP
1	0	0	0	0
2	0	0	0	0
3	10	0	0	0
4	10	0	0	0
5	10	0	0	0
6	100	0	0	0
7	69	9	9	9
8	5	0	2	2
9	20	3	5	5
10	5	6	8	8
11	5	8	10	10
12	5	9	11	11
13	0	9	11	11
14	0	10	12	12
15	0	11	13	13
16	5	11	13	13
17	5	12	14	14
18	25	12	14	14
19	35	9	11	11
20	35	7	9	9
21	30	9	11	11
22	8	8	10	10
23	32	2	4	4
24	0	8	8	8

Correct

Delivery Date	11-Aug
Type	ACTIVE
Product	SR
Price (PP +/- X)	\$0.00
Unit	ABC1
Seller	EXAMPLE
Substitution for Virtual Unit?	No
HE1	0
HE2	0
HE3	0
HE4	0
HE5	0
HE6	0
HE7	0
HE8	10
HE9	10
HE10	10
HE11	10
HE12	10
HE13	10
HE14	10
HE15	10
HE16	10
HE17	10
HE18	10
HE19	10
HE20	10
HE21	10
HE22	10
HE23	10
HE24	0
Unit Max:	10
Product Max:	10
Product Min:	0

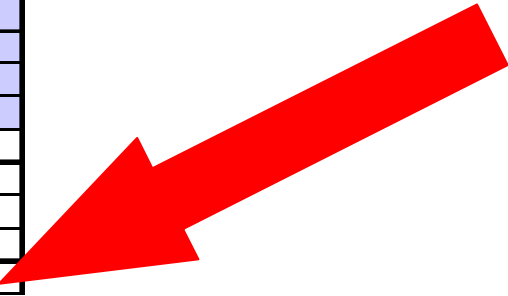
Incorrect

Delivery Date	11-Aug
Type	ACTIVE
Product	SR
Price (PP +/- X)	\$0.00
Unit	ABC1
Seller	EXAMPLE
Substitution for Virtual Unit?	No
HE1	0
HE2	0
HE3	0
HE4	0
HE5	0
HE6	0
HE7	0
HE8	0
HE9	3
HE10	6
HE11	8
HE12	9
HE13	9
HE14	10
HE15	10
HE16	10
HE17	10
HE18	10
HE19	9
HE20	7
HE21	9
HE22	8
HE23	2
HE24	0
Unit Max:	10
Product Max:	10
Product Min:	0

Product minimum can only be 0MW or 5MW

Delivery Date	11-Aug
Type	ACTIVE
Product	SR
Price (PP +/- X)	\$0.00
Unit	ABC1
Seller	EXAMPLE
Substitution for Virtual Unit?	No
HE1	0
HE2	0
HE3	0
HE4	0
HE5	0
HE6	0
HE7	0
HE8	10
HE9	10
HE10	10
HE11	10
HE12	10
HE13	10
HE14	10
HE15	10
HE16	10
HE17	10
HE18	10
HE19	10
HE20	10
HE21	10
HE22	10
HE23	10
HE24	0
Unit Max:	10
Product Max:	10
Product Min:	0

Must be either 0MW or 5MW
Offers with >5MW will not be accepted



OTC Offer & Allocation Guidelines



- The same volume must be offered for all hours (on-peak/off-peak)
 - Offers received that do not provide the same volume for all on-peak or off-peak hours will not be considered
- Volume must be offered for all hours (on-peak/off-peak)
 - Offers received that do not provide volume for all on-peak or off-peak hours will be allocated last
- The product min. must be 0MW or 5MW
 - 0MW if ≥ 5 MW has been sold on Watt-Ex
 - 5MW if no product has been sold on Watt-Ex
 - Offers received with a min. greater than 5MW will not be allocated

OTC Offer & Allocation Guidelines Cont'd



- If providing more than one offer on the same unit, the offer must indicate the maximum volume that is available on the unit for OTC.
- If providing more than one offer for the same product on the same unit, the offer must indicate the maximum volume for the product.

Offer Example 1

Delivery Date	11-Aug
Type	ACTIVE
Product	SR
Price (PP +/- X)	\$0.00
Unit	ABC1
Seller	EXAMPLE
Substitution for Virtual Unit?	No
HE1	0
HE2	0
HE3	0
HE4	0
HE5	0
HE6	20
HE7	20
HE8	0
HE9	0
HE10	0
HE11	0
HE12	0
HE13	0
HE14	0
HE15	0
HE16	0
HE17	0
HE18	0
HE19	0
HE20	0
HE21	0
HE22	0
HE23	0
HE24	20
Unit Max:	20
Product Max:	20
Product Min:	0

Invalid

Volume must be offered in all hours (on-peak or off-peak).

In the example HE1 to HE5 must also be 20MW

Allocation Rule:

Offer will be allocated only after all other offers have been allocated.

Offer Example 2

Delivery Date	11-Aug
Type	ACTIVE
Product	SR
Price (PP +/- X)	\$0.00
Unit	ABC1
Seller	EXAMPLE
Substitution for Virtual Unit?	No
HE1	10
HE2	10
HE3	10
HE4	10
HE5	10
HE6	20
HE7	20
HE8	0
HE9	0
HE10	0
HE11	0
HE12	0
HE13	0
HE14	0
HE15	0
HE16	0
HE17	0
HE18	0
HE19	0
HE20	0
HE21	0
HE22	0
HE23	0
HE24	20
Unit Max:	20
Product Max:	20
Product Min:	0

Invalid

The volume offered must be the same for all hours (on-peak or off-peak)

In the example HE1 to HE5 must also be 20MW or HE6,7 and 24 must be 10MW.

Allocation Rule:

Offer will not be considered for allocation

Offer Example 3

Delivery Date	11-Aug	11-Aug	11-Aug
Type	ACTIVE	ACTIVE	ACTIVE
Product	RR	RR	RR
Price (PP +/- X)	\$0.00	\$1.00	\$2.00
Unit	ABC1	ABC1	ABC1
Seller	EXAMPLE	EXAMPLE	EXAMPLE
Substitution for Virtual Unit?	No	No	No
HE1	10	10	10
HE2	10	10	10
HE3	10	10	10
HE4	10	10	10
HE5	10	10	10
HE6	10	10	10
HE7	10	10	10
HE8	0	0	0
HE9	0	0	0
HE10	0	0	0
HE11	0	0	0
HE12	0	0	0
HE13	0	0	0
HE14	0	0	0
HE15	0	0	0
HE16	0	0	0
HE17	0	0	0
HE18	0	0	0
HE19	0	0	0
HE20	0	0	0
HE21	0	0	0
HE22	0	0	0
HE23	0	0	0
HE24	10	10	10
Unit Max:	20	20	20
Product Max:	20	20	20
Product Min:	0	0	0

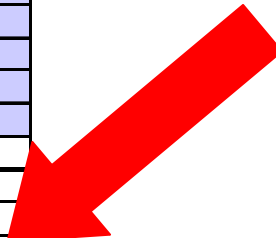
Invalid

For each product (RR,SR, SUP) – volume offered can not be greater than the unit or product max.

The example offer is for 30MW of RR but the unit max. is only 20MW

Allocation Rule:

Offer will only be allocated up to the unit and product max.



Offer Example 4

Delivery Date	11-Aug	11-Aug	11-Aug
Type	ACTIVE	ACTIVE	ACTIVE
Product	RR	RR	RR
Price (PP +/- X)	\$0.00	\$1.00	\$2.00
Unit	ABC1	ABC1	ABC1
Seller	EXAMPLE	EXAMPLE	EXAMPLE
Substitution for Virtual Unit?	No	No	No
HE1	10	10	10
HE2	10	10	10
HE3	10	10	10
HE4	10	10	10
HE5	10	10	10
HE6	10	10	10
HE7	10	10	10
HE8	0	0	0
HE9	0	0	0
HE10	0	0	0
HE11	0	0	0
HE12	0	0	0
HE13	0	0	0
HE14	0	0	0
HE15	0	0	0
HE16	0	0	0
HE17	0	0	0
HE18	0	0	0
HE19	0	0	0
HE20	0	0	0
HE21	0	0	0
HE22	0	0	0
HE23	0	0	0
HE24	10	10	10
Unit Max:			
Product Max:			
Product Min:			

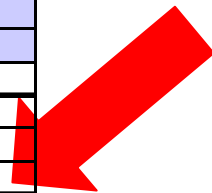
Valid – but Caution

For each product (RR,SR, SUP) – volume offered can not be greater than the unit or product max.

Allocation Rule:

“Blank” Unit max or Product Max – assume unit is capable of providing all volume offered across all products

“Blank” Product Min. – assume unit has sold \geq 5MW on Watt-Ex



Offer Example 5

Delivery Date	11-Aug	11-Aug	11-Aug	11-Aug	11-Aug
Type	ACTIVE	ACTIVE	ACTIVE	ACTIVE	ACTIVE
Product	RR	RR	RR	SR	SUP
Price (PP +/- X)	\$0.00	\$1.00	\$2.00	\$3.00	\$3.00
Unit	ABC1	ABC1	ABC1	ABC1	ABC1
Seller	EXAMPLE	EXAMPLE	EXAMPLE	EXAMPLE	EXAMPLE
Substitution for Virtual Unit?	No	No	No	No	No
HE1	10	10	10	30	30
HE2	10	10	10	30	30
HE3	10	10	10	30	30
HE4	10	10	10	30	30
HE5	10	10	10	30	30
HE6	10	10	10	30	30
HE7	10	10	10	30	30
HE8	0	0	0	0	0
HE9	0	0	0	0	0
HE10	0	0	0	0	0
HE11	0	0	0	0	0
HE12	0	0	0	0	0
HE13	0	0	0	0	0
HE14	0	0	0	0	0
HE15	0	0	0	0	0
HE16	0	0	0	0	0
HE17	0	0	0	0	0
HE18	0	0	0	0	0
HE19	0	0	0	0	0
HE20	0	0	0	0	0
HE21	0	0	0	0	0
HE22	0	0	0	0	0
HE23	0	0	0	0	0
HE24	10	10	10	30	30
Unit Max:	30	30	30	30	30
Product Max:	30	30	30	30	30
Product Min:	0	0	0	0	0

Valid

Volume can be offered up to the unit max for each product.

Volume offered for each product can not exceed the unit or product max.

Allocation Rule:

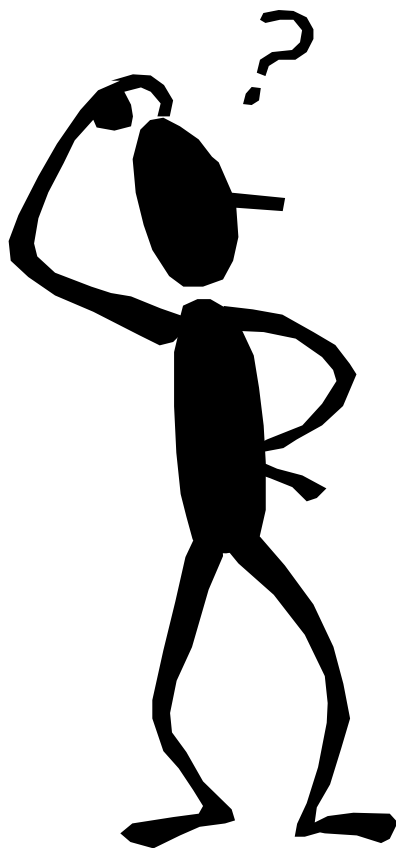
RR is allocated first, followed by SR, followed by SUP

Email Correspondence



- OTC offers must be submitted via email
 - All offers should be sent to:
 - OTC@aeso.ca (OTC Mailbox) and aesocom@telus.net (Backup Account)
 - The OTC mailbox will provide the participant with an auto-reply notifying receipt of the offer.
 - If the participant does not receive the auto-reply they should contact the AESO immediately
 - The OTC mailbox is the primary source for OTC correspondence
 - Offers sent to the Back-up account are always reconciled against offers sent to the OTC mailbox.
 - If the OTC mailbox is not working the offer should be received by the Back-up account.
- The steps above have been implemented to mitigate against the majority of potential email issues

OTC Questions & Answers



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