

# CommonWealth

Resource Management Corporation

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January 13, 2017

Municipal Review Committee, Inc.  
c/o Greg Louder, Executive Director  
395 State Street  
Ellsworth, Maine 04605

RE: Review of the Tip Fee for the First Quarter of 2017

Dear Members of the MRC:

In January 2017, the Municipal Review Committee (the MRC) received from the Penobscot Energy Recovery Company (PERC) a calculation of the tipping fee for the first quarter of 2017 (the Quarterly Adjustment, which is provided as Attachment 1). The Quarterly Adjustment calculates a tipping fee of **\$ 79.20** per ton that would be in effect for (a) Charter Municipalities that have executed the Second Amended, Restated and Extended Waste Disposal Agreements (the Waste Disposal Agreement); and (b) other entities with contracts that use the Quarterly Adjustment as a basis for contract tip fees.

PERC supplied the following materials to document the Quarterly Adjustment: (1) data and information in support of the calculation of loan interest costs applicable to the quarter and projected for the upcoming quarter, provided as Exhibit A; (2) tons of and disposal costs for ash, glass and grit, non-processibles and ferrous materials on both a cash and accrual basis, provided as Exhibit B; and (3) tons of waste delivered for each month in 2016 for all customers, for each of the Charter Municipalities and other municipalities having disposal contracts with PERC; and for sources of out-of-state spot market waste, provided as Exhibits C-1 through C-3. PERC had separately provided monthly performance reports for its facility (the Facility) through November 2016.

CommonWealth Resource Management Corporation (CommonWealth) has reviewed and duplicated PERC's calculations of the Quarterly Adjustment, and has reviewed various aspects of the performance of the Facility. This letter presents our review of the Quarterly Adjustment. Comments and recommendations on management of Performance Credits, Net Cash Flow and other MRC assets, and on compliance with annual performance standards, are or will be provided in separate letters.

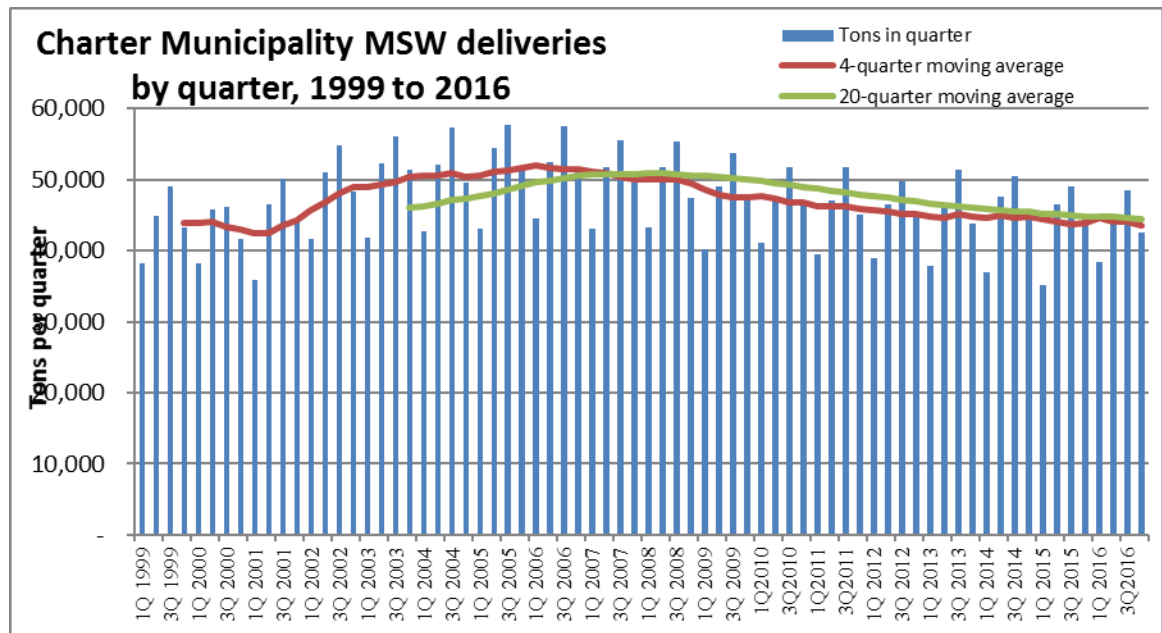
1. Base Fee inflation. PERC adjusted the Base Rate to \$64.02 in 2017 from \$63.08 in 2016, an increase of 1.5 percent. This escalation is based on the percentage change to September 2016 from September 2015 of the Consumer Price Index-All Urban Consumers (CPI-U), U.S. cities average, all items index, as published by the United States Bureau of Labor Statistics. Having reviewed the CPI-U data, Commonwealth concurs that PERC's escalation of the Base Rate complies with the Agreement.
2. Charter Municipalities and tonnage data. Regarding the customer and tonnage data and estimates provided by PERC in Exhibit C:
  - Actual 2017 deliveries vs. 2016. The Charter Municipalities as a group are noted in Exhibit C-2 as having delivered 42,485 tons in the past quarter as compared to 44,673 tons in the fourth quarter of 2015 --- a decrease of 2,188 tons (-5.2%). The deliveries reported by PERC in 2016 represent 94.4 percent of the GAT for 2016 of 184,252 tons, but do not include 27,944 tons of in-state MSW delivered to the PERC facility in 2016 under commercial accounts that originated within Charter Municipalities and therefore should have been counted toward the GAT. The deliveries do include 298.81 tons in the quarter, and 863.15 tons for all of 2016, that were delivered by Pine Tree Waste as backfill for tons diverted from Charter Municipalities through new single-sort recycling programs.
  - Equity Charter Municipalities. The Equity Charter Municipalities as a group delivered 38,322 tons in the past quarter as compared to 40,013 tons in the fourth quarter of 2015 --- a decrease of 1,691 tons (-4.2%).
  - New Charter Municipalities. The New Charter Municipalities delivered 4,163 tons in the past quarter, as compared to 4,661 tons delivered in the fourth quarter of 2015 --- a decrease of 497 tons (-10.7 percent).

**MSW Deliveries to PERC in 2016 and 2015, tons by calendar quarter**

	Equity Charters				New Charters				All Charters			
	2016	2015	Change	%	2016	2015	Change	%	2016	2015	Change	%
1Q	34,436	31,543	2,892	9.2%	3,893	3,652	241	6.6%	38,328	35,195	3,134	8.9%
2Q	40,025	41,680	(1,656)	-4.0%	4,542	4,912	(369)	-7.5%	44,567	46,592	(2,025)	-4.3%
3Q	43,941	43,981	(40)	-0.1%	4,608	5,056	(448)	-8.9%	48,549	49,037	(488)	-1.0%
4Q	38,322	40,013	(1,691)	-4.2%	4,163	4,661	(497)	-10.7%	42,485	44,673	(2,188)	-4.9%
Total	156,723	157,217	(494)	-0.3%	17,207	18,280	(1,074)	-6.2%	173,929	175,497	(1,568)	-0.9%

- Deliveries of individual Charter Municipalities. The following Charter Municipalities had significant absolute or percentage declines in tonnage in the fourth quarter of 2016 compared to the fourth quarter of 2015: **Baileyville, Bangor, Lee, Mars Hill, Mid-Coast SWD, Mid-Maine SWD and Thorndike** (Equity Charters); and **Etna, Freedom, Knox, Machias and Springfield** (New Charters). The Charter Municipalities with the most significant increases in tonnage in 2016 over the fourth quarter of 2015 include **Waterville** (Equity Charters), and **E. Millinocket** (New Charters).

- Towns without Charter or long-term agreements. The long-term communities that have not yet switched to charter status (two as of the end of the quarter – **Burlington, and Lowell**) delivered 65 tons in the quarter. The host community of **Orrington** delivered 409 tons in the quarter. The Towns of **Detroit, Ellsworth, Frankfort, Monroe, Pittsfield, Prospect** and **Winterport** delivered 1,576 tons of waste in the quarter under successor arrangements to the OWL agreements. In addition, the Town of **Greenville** (221 tons in the quarter), the Town of **Willimantic** (11 tons in the quarter), the Town of **Warren** (216 tons in the quarter), the Towns of **Nobleboro and Jefferson** (612 tons in the quarter), and the Town of **Eastbrook** (67 tons in the quarter) are shown on the list of PERC customers on Exhibit C-1, but are not shown on Exhibit C-2.



- Out-of-state spot waste and supplemental fuel. PERC received more out-of-state spot market waste in the quarter than had been budgeted in the prior quarterly adjustment (5,219 actual tons vs. 2,400 budgeted tons). PERC received 17,410 tons of out-of-state MSW and combusted a total of 85 tons of wood chips for use as supplemental fuel in the first two months of the quarter.
- Pine Tree Waste contracts. Pine Tree Waste delivered 17,620 tons in the quarter, of which 10,472 tons were in-state MSW and 7,148 tons were out-of-state MSW.
- Summary of sources of waste. PERC's sources of waste are summarized below:

	4Q 2016		2016 year to date	
	Tons	Share of total	Tons	Share of total
<b>Municipal waste</b>				
Charter Municipalities				
Equity	38,321.79	49.3%	156,722.66	50.5%
New	<u>4,163.30</u>	<u>5.4%</u>	<u>17,206.72</u>	<u>5.5%</u>
Total	42,485.09	54.6%	173,929.38	56.0%
Carryover towns	65.08	0.1%	259.24	0.1%
Other (OWL and short-term)	2,702.03	3.5%	10,900.24	3.5%
Host community	<u>409.41</u>	<u>0.5%</u>	<u>1,583.98</u>	<u>0.5%</u>
Subtotal	45,661.61	58.7%	186,672.84	60.1%
<b>Commercial waste</b>				
In-state commercial	14,679.99	18.9%	64,399.07	20.7%
Out-of-state	<u>17,410.18</u>	<u>22.4%</u>	<u>59,372.22</u>	<u>19.1%</u>
Subtotal	32,090.17	41.3%	123,771.29	39.9%
<b>Total</b>	<b>77,751.78</b>	<b>100.0%</b>	<b>310,444.13</b>	<b>100.0%</b>

3. Actual residuals disposal costs. PERC's actual total residuals disposal costs for the prior quarter included in the tip fee calculation were 1.5 percent more than PERC had projected. The quantity of MSW received was 2.1 percent more than PERC had projected, so the actual cost per ton of residuals disposal for the quarter was below the projected cost per ton. In particular,

- Actual costs for glass and grit disposal were 0.7 percent above the projections.
- Actual costs for ash disposal were 7.4 percent below the projections.
- Actual costs for non-processibles included in the tip fee calculation, accounting for landfill disposal, were 41.5 percent above the projections. PERC sent all non-processable material to the landfill in the quarter.
- PERC continues to have ferrous material removed at no charge, because the value of the material covers the cost of transportation to market.

Exhibit B includes a manual downward adjustment of \$1,262.45 to the cost of non-processable material for the fourth quarter, which is labeled as a correction for an overaccrual in September 2016. CRMC notes that information made available by PERC subsequent to the approval of the tip fee adjustment for the fourth quarter of 2016 indicates the need for a downward adjustment of \$1,272.45 to the cost of non-processable material in order to correct overaccruals in August and September 2016 and may indicate a potential need for additional adjustments. PERC is aware of the overaccrual issue, which is in the process of being resolved.

In view of the modest magnitudes of the corrections, which are well within the range of amounts typically corrected by the quarterly reconciliations, CRMC recommends that the MRC accept the calculation for the current quarter and allow correction of overaccruals to be deferred to the calculation of the tip fee adjustment for the second quarter of 2017.

Regarding the disposal cost amounts for materials other than non-processables, based on our review, Commonwealth agrees that PERC's calculations of actual passed-through disposal costs are reasonable.

4. Projected residual stream disposal costs. PERC projects the cost for ash disposal for the upcoming quarter to be \$647,000, equivalent to \$9.38 per ton of MSW to be received in the quarter.

PERC projects the cost for glass and grit disposal for the upcoming quarter to be \$620,000, equivalent to \$8.99 per ton of MSW to be received in the quarter.

PERC projects the cost for disposal of non-processibles for the upcoming quarter to be \$165,000, equivalent to \$2.39 per ton of MSW to be received, which reflects prior levels of cost to process this material.

PERC projects no cost for disposition of recovered ferrous material.

Overall, Commonwealth believes the costs projected by PERC for residuals disposal are reasonably consistent with calculations based on (1) the estimate of tons of waste to be processed in the upcoming quarter; (2) the generation rates of these residual streams in previous quarters; (3) actual unit costs for transportation and disposal of each residual stream in previous quarters; and (4) projected unit costs for transport and disposal of each residual stream in the upcoming quarters. Differences between estimated and actual costs will be reconciled in the next quarterly adjustments.

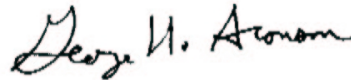
5. Changes in rate of interest cost. Commonwealth has reviewed PERC's calculations of the changes of rate of interest cost for the prior and upcoming quarters and agrees that the calculations are acceptable to the MRC. The calculations reflect the recent re-financing of PERC's outstanding bonds with a bank loan from TDBank. The calculation of the change of rate of interest cost in the quarter no longer needs to account for the costs of three interest rate swaps purchased by PERC to reduce its exposure to future interest rate increases, all of which have now expired. Overall, PERC paid interest, including the cost of the swaps, at a rate equivalent to **2.77 percent** in the quarter.
6. Reconciliation from the prior quarter. The Quarterly Adjustment includes a positive reconciliation amount of \$5,435 (about \$0.14 per ton) to reconcile PERC's actual costs with the basis for its tipping fee in the previous quarter. That is, the tip fee in the previous quarter was set \$0.14 per ton **lower** than what would have been required for PERC to recover exactly the amount it was due from the Charter Municipalities in the quarter. This reconciliation amount has the effect of increasing the current tip fee to compensate for the tip fee in the prior quarter.
7. Environmental Performance. PERC reported no emission exceedances in the monthly performance reports received during the quarter.
8. CMRA Deposits: On November 18, 2016, PERC made a deposit of \$563,594.30 into the CMRA Fund for the preceding quarter. Such deposit was made as required pursuant to Article VII, Section I, of the Waste Disposal Agreement.

9. Format of the Quarterly Adjustment. The format of the Quarterly Adjustment and the associated documentation provided by PERC are reasonable and sufficient for reviewing PERC's calculations. The version of the Quarterly Adjustment received by Commonwealth did contain a certification from the Facility controller regarding the validity of quarterly pass-through costs as required by Schedule C, Section F of the Agreement.
10. Compliance with Performance Standards. The Waste Disposal Agreements, Schedule B, Section C., provide for adjustments to the tipping fee in the first quarter of each Operating Year in the event that PERC has failed to meet the Performance Standards for the preceding Operating Year. As of this writing, PERC has not provided the MRC with evidence regarding compliance with Performance Standards for 2016. CRMC will report at the Board meeting on PERC's compliance with Performance Standards based on evidence provided by PERC as of that meeting.

Subject to receipt of the monthly performance report for December 2016, receipt of evidence of PERC compliance with Performance Standards for 2016, and the comments above, Commonwealth believes that PERC's Quarterly Adjustment for the first quarter of 2017 complies with the Waste Disposal Agreement and recommends acceptance by the MRC Board.

If you have any further questions regarding the Quarterly Adjustment, please feel free to contact me.

Sincerely,



George H. Aronson  
Principal

Attachment 1 Quarterly Adjustment Received from PERC

Copies: Bangor Hydro, PERC



# Penobscot Energy Recovery Company

29 Industrial Way  
Orrington, Maine 04474  
(207) 825-4566

ESOCO ORRINGTON, LLC  
Plant Operator

January 5, 2017

PERC Municipal Review Committee  
c/o Mr. Greg Louder  
395 State Street  
Ellsworth, Maine 04605

**Subject: First Quarter 2017 Tipping Fee Calculation**

Committee Members:

Attached for your review is the first quarter 2017 Tipping Fee Calculation along with appropriate back-up information to support a "Charter Municipality" tipping fee rate of \$79.20.

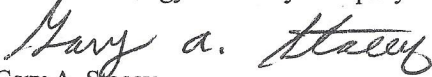
The information in Exhibits A through C, supplied herewith, along with the monthly Plant Performance Reports, should be sufficient to duplicate and verify the tipping fee calculation.

Also enclosed is a certificate, signed by the Plant Controller, certifying the validity of the quarterly pass-through costs for the quarter ending December 31, 2016.

Representatives from PERC will be available at your next board meeting to answer any questions concerning the new tipping fee and to provide additional information concerning plant operations.

If any questions arise in the interim please call.

Very truly yours,  
Penobscot Energy Recovery Company

  
Gary A. Stacey  
Plant Controller

Attachments:

Cc: G. Aronson, CWRM  
H. Lang, PERC  
J. Noer, SET  
K. Nordby, PERC Holdings



# Penobscot Energy Recovery Company


29 Industrial Way  
Orrington, Maine 04474  
(207) 825-4566

ESOCO ORRINGTON, LLC  
Plant Operator

## CERTIFICATE

The undersigned controller of Penobscot Energy Recovery Company ("PERC") states that he has reviewed the quarterly Pass-through Costs as presented on the tipping fee calculation quarterly reconciliation statement for the quarter ending December 31, 2016, that the quarterly reconciliation statement is a correct representation of the matters set forth and was prepared in accordance with generally acceptable accounting principles consistent with PERC's historical operating practices.

Dated: January 5, 2017

  
Gary A. Stacey, Plant Controller  
ESOCO Orrington, LLC, as Agent



## TIPPING FEE CALCULATION

06-Jan-17

## TIPPING FEE:

=====

BASE RATE COMPONENT

CPI-U

VARIABLE RATE COMPONENT

TOTAL TIPPING FEE

	4th QTR '16 ESTIMATE	4th QTR '16 ACTUAL	1st QTR '17 ESTIMATE
=====	=====	=====	=====
BASE RATE COMPONENT	\$63.08	\$63.08	\$64.02
CPI-U	\$15.42	\$15.42	1.50%
VARIABLE RATE COMPONENT	\$78.50	\$78.50	\$15.18
=====	=====	=====	=====
TOTAL TIPPING FEE	\$78.50	\$78.50	\$79.20
=====	=====	=====	=====
TOTAL MSW DELIVERED (TONS)	76,125	77,752	69,000
CHARTER MSW DELIVERED (TONS)	42,500	42,485	38,000
CHARTER MSW FACTOR #1	0.5583	0.5464	0.5507
OUT-OF-STATE SPOT MSW (TONS)	2,400	5,219	3,856
CHARTER MSW FACTOR #2	0.5765	0.5857	0.5833
=====	=====	=====	=====
PASSTHROUGH COSTS:			
CHANGE IN DISPOSAL COSTS	\$398,921	\$403,706	\$296,035
SUPPLEMENTAL FUEL COSTS (RECYCLING)	\$0	\$0	\$0
RECONCILIATION OF PREVIOUS QTR	(\$48,595)	(\$48,595)	\$5,435
OPERATING STANDARDS CREDIT	\$0	\$0	\$0
CHANGE IN RATE OF INTEREST COSTS	(\$11,458)	(\$10,928)	(\$7,897)
=====	=====	=====	=====
AMOUNT OWED TO PERC IN QTR	\$338,869	\$344,185	\$293,574
VARIABLE RATE CHANGE (C.I.L. COSTS)			
VARIABLE RATE CHANGE (OTHER PASSTHROUGH)	\$7.97		\$7.73
=====	=====	=====	=====
TOTAL VARIABLE RATE CHANGE \$\$\$/TON	\$7.97		\$7.73
=====	=====	=====	=====
AMOUNT ACTUALLY BILLED IN QTR		\$338,750	

## TIPPING FEE CALCULATION

06-Jan-17

TIPPING FEE:

	4th QTR '16 ESTIMATE	4th QTR '16 ACTUAL	1st QTR '17 ESTIMATE
CHANGE IN DISPOSAL COSTS			
RESIDUE DISPOSAL COST	\$725,000	\$671,523	\$647,000
G&G DISPOSAL COST			
FERROUS DISPOSAL COST	\$709,000	\$714,089	\$620,000
NON-PRO DISPOSAL COST	\$0	\$0	\$0
BYPASS DISPOSAL COST	\$175,000	\$247,689	\$165,000
FEPR DISPOSAL COST	\$0	\$0	\$0
FEPR DISPOSAL COST	\$884,000	\$961,758	\$785,000
TOTAL DISPOSAL COST	\$1,609,000	\$1,633,282	\$1,432,000
CHANGE IN DISPOSAL COST (COST-BASE)	\$714,538	\$738,820	\$537,538
CHARTER SHARE OF COSTS (FACTOR #1)	\$398,921	\$403,706	\$296,035
CHANGE IN RATE OF INTEREST COSTS			
ACTUAL TOTAL INTEREST FOR QTR.			
INTEREST CALC. @ 6.40% BASE RATE	\$12,740	\$13,962	\$11,945
CHANGE IN RATE OF INTEREST COSTS	\$32,616	\$32,616	\$25,482
CHARTER SHARE OF COSTS (FACTOR #2)	(\$19,876)	(\$18,653)	(\$13,537)
	(\$11,458)	(\$10,926)	(\$7,897)

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## Change Output Options:

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Data extracted on: January 5, 2017 (4:02:44 PM)

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## Consumer Price Index - All Urban Consumers

Series Id: CUUR0000SA0  
 Not Seasonally Adjusted  
 Area: U.S. city average  
 Item: All items  
 Base Period: 1982-84=100

Download: .xlsx

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	HALF1	HALF2
2008	211.080	211.693	213.528	214.823	216.632	218.815	219.964	219.086	218.783	216.573	212.425	210.228	214.429	216.177
2009	211.143	212.193	212.709	213.240	213.856	215.693	215.351	215.834	215.969	216.177	216.330	215.949	213.139	215.935
2010	216.687	216.741	217.631	218.009	218.178	217.965	218.011	218.312	218.439	218.711	218.803	219.179	217.535	218.576
2011	220.223	221.309	223.467	224.906	225.964	225.722	225.922	226.545	226.889	226.421	226.230	225.672	223.598	226.280
2012	226.665	227.663	229.392	230.085	229.815	229.478	229.104	230.379	231.407	231.317	230.221	229.601	228.850	230.338
2013	230.280	232.166	232.773	232.531	232.945	233.504	233.596	233.877	234.149	233.546	233.069	233.049	232.366	233.548
2014	233.916	234.781	236.293	237.072	237.900	238.343	238.250	237.852	238.031	237.433	236.151	234.812	236.384	237.088
2015	233.707	234.722	236.119	236.599	237.805	238.638	238.654	238.316	237.945	237.838	237.336	236.525	236.265	237.769
2016	236.916	237.111	238.132	239.261	240.229	241.018	240.628	240.849	241.428	241.729	241.353		238.778(R)	

R : Revised

## 12-Month Percent Change

Series Id: CUUR0000SA0  
 Not Seasonally Adjusted  
 Area: U.S. city average  
 Item: All items  
 Base Period: 1982-84=100

Download: .xlsx

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	HALF1	HALF2
2008	4.3	4.0	4.0	3.9	4.2	5.0	5.6	5.4	4.9	3.7	1.1	0.1	4.2	3.4
2009	0.0	0.2	-0.4	-0.7	-1.3	-1.4	-2.1	-1.5	-1.3	-0.2	1.8	2.7	-0.6	-0.1
2010	2.6	2.1	2.3	2.2	2.0	1.1	1.2	1.1	1.1	1.2	1.1	1.5	2.1	1.2
2011	1.6	2.1	2.7	3.2	3.6	3.6	3.6	3.8	3.9	3.5	3.4	3.0	2.8	3.5
2012	2.9	2.9	2.7	2.3	1.7	1.7	1.4	1.7	2.0	2.2	1.8	1.7	2.3	1.8
2013	1.6	2.0	1.5	1.1	1.4	1.8	2.0	1.5	1.2	1.0	1.2	1.5	1.5	1.4
2014	1.6	1.1	1.5	2.0	2.1	2.1	2.0	1.7	1.7	1.7	1.3	0.8	1.7	1.5
2015	-0.1	0.0	-0.1	-0.2	0.0	0.1	0.2	0.2	0.0	0.2	0.5	0.7	-0.1	0.3
2016	1.4	1.0	0.9	1.1	1.0	1.0	0.8	1.1	1.5	1.6	1.7		1.1(R)	

Revised