

## **EXHIBIT 6**

# **CALCULATION OF REVENUE DEFICIENCY OR SUFFICIENCY**

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# REVENUE DEFICIENCY

## Overview

The information in this Exhibit supports and summarizes OPUCN's request in this Application for the increase in its revenue requirements for the 2021 Test Year based on its revenue deficiency for 2021, relative to that computed by applying its 2021 load forecast to 2020 Board approved electricity distribution rates and the proposed rates for 2021 Test Year. OPUCN requires this increases in order to:

- provide necessary cash flow to support its capital and operating budgets for 2021 as described in Exhibits 2 and 4;
- continue to provide a safe, reliable supply of electricity to the customers it serves; and
- allow it to earn a fair return on the cost of its financial capital in a manner consistent with the *Report of the Board on Cost of Capital for Ontario's Regulated Utilities* issued December 11, 2009 and as provided in Exhibit 5.

OPUCN has provided detailed calculations supporting its 2021 revenue deficiencies in the Board's Revenue Requirement Work Form (the "RRWF"), which accompanies this Application as Appendix 6-1. Table 6-1 identifies the inputs and calculations used to determine the deficiency.

## Revenue Requirement

OPUCN's revenue requirement is comprised of the following components:

- Operations, Maintenance, and Administration Expenses;
- Amortization Expense;
- PILs; and
- Return on Rate Base (Debt Interest Expense + Return on Equity).

OPUCN derives its service revenue requirement through: i) distribution rates charged to

27 its customers; and ii) other revenues. Other revenues comprise: Board-approved specific  
28 service charges; late payment charges; and other miscellaneous sources. These other  
29 revenues, described in detail in Exhibit 3, are treated as offsets against OPUCN's service  
30 revenue requirement, the net amount of which represents the base revenue requirement  
31 upon which class-specific distribution rates are calculated.

32 OPUCN's revenue deficiency is detailed by item in Table 6-1.

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**TABLE 6-1 - REVENUE DEFICIENCY 2021**

Description	2021 Test Year Existing Rates	2021 Test Year Required Rates
<b>Revenue:</b>		
Revenue Deficiency		\$1,431,472
Distribution Revenue	\$25,918,610	\$25,918,610
Other Operating Revenue Offsets - net	\$1,299,981	\$1,299,981
<b>Total Revenue</b>	<b>\$27,218,590</b>	<b>\$28,650,062</b>
<b>Costs and Expenses:</b>		
Administrative & General, Billing & Collecting	\$10,939,101	\$10,939,101
Operations & Maintenance	\$3,168,448	\$3,168,448
Property Taxes	\$152,097	\$152,097
Donations - LEAP	\$34,374	\$34,374
Amortization/Depreciation	\$6,216,997	\$6,216,997
Deemed Interest Expense	\$3,113,225	\$3,113,225
<b>Total Cost and Expenses</b>	<b>\$23,624,242</b>	<b>\$23,624,242</b>
<b>Utility Income Before Income Taxes</b>	<b>\$3,594,349</b>	<b>\$5,025,821</b>
<b>Income Taxes:</b>		
Tax Adjustments to Accounting Income	(\$5,620,936)	(\$5,620,936)
Taxable Income	(\$2,026,587)	(\$595,115)
Income Tax on Taxable Income	\$ -	\$ -
Income Tax Credits	\$ -	\$ -
<b>Utility Net Income</b>	<b>\$3,594,349</b>	<b>\$5,025,821</b>
<b>Actual Return on Rate Base:</b>		
Utility Rate Base	\$147,450,826	\$147,450,826
Interest Expense	\$3,113,225	\$3,113,225
Net Income	\$3,594,349	\$5,025,821
<b>Total Actual Return on Rate Base</b>	<b>\$6,707,573</b>	<b>\$8,139,045</b>
Actual Return on Rate Base	<b>4.55%</b>	<b>5.52%</b>
<b>Required Return on Rate Base:</b>		
Utility Rate Base	\$147,471,268	\$147,471,268
Return on Debt (Weighted)	3.52%	3.52%
Return on Equity	8.52%	8.52%
Deemed Interest Expense	\$3,113,225	\$3,113,225
Return on Equity	\$5,025,821	\$5,025,821
<b>Total Return</b>	<b>\$8,139,045</b>	<b>\$8,139,045</b>
Expected Return on Rate Base	<b>5.52%</b>	<b>5.52%</b>
<b>Revenue Deficiency/(Sufficiency)</b>		
Revenue Deficiency/(Sufficiency)	\$1,431,472	\$ -
<b>Gross Revenue Deficiency/(Sufficiency)</b>	<b>\$1,431,472</b>	

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## Cost Drivers of Revenue Deficiency

Table 6-2 below summarises the movement in revenue requirement from 2019 Approved to the 2021 Test Year, and the resulting revenue deficiency.

**TABLE 6-2 – DRIVERS OF REVENUE DEFICIENCY 2021**

<b>Revenue Deficiency Drivers</b>	<b>2019 OEB Approved</b>	<b>2020 IRM (1.85% Increase)</b>	<b>2021 Proposed</b>	<b>Changes 2021 Proposed v 2020</b>
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D = C-B</b>
<b><u>RATE BASE CALCULATION</u></b>				
Fixed Assets Opening Balance	109,527,480		133,293,235	
Fixed Assets Closing Balance	127,226,919		141,314,041	
Average Fixed Asset Balance for Year	118,377,200		137,303,638	
Working Capital Allowance	13,368,221		10,167,630	
Rate Base	131,745,420		147,471,269	
Regulated Rate of Return	5.81%		5.52%	
Regulated Return on Capital	7,655,082		8,139,045	
<b><u>REVENUE REQUIREMENT</u></b>				
Return on Rate Base (from above)	7,655,082	7,796,701	8,139,045	342,345
OM&A Expenses	13,307,442	13,553,629	14,294,020	740,391
Amortization	5,393,321	5,493,098	6,216,997	723,899
Taxes	470,788	479,498	0	(479,498)
Other ( <i>changes in Rates of Return and Working Capital Allowance Rates</i> )				(56,326)
Service Revenue Requirement	26,826,633	27,322,925	28,650,062	1,270,811
Revenue Offsets	(1,434,111)	(1,460,642)	(1,299,981)	160,661
<b>Base Revenue Requirement</b>	<b>25,392,522</b>	<b>25,862,283</b>	<b>27,350,082</b>	<b>1,431,472</b>

The primary drivers behind the deficiency in 2021 are:

- The cumulative capital investments made in the years 2020 and 2021, increasing the Rate Base from \$131.7 million approved for 2019 to \$147.5 million in the 2021 Test Year, plus the associated amortization expense. Further detail related to these increases in rate base are included in Exhibit 2 of this application;

- 47 • The increase in OM&A of \$0.7 million, details of which are summarised in Exhibit  
48 4 of this application; and
- 49 • A decrease in income taxes of \$0.5 million, principally due to accelerated capital  
50 cost allowance rules introduced in 2019. Further detail is included in Exhibit 4 of  
51 this application.  
52

## 53 APPENDIX 6-1: BOARD REVENUE REQUIREMENT MODEL 2015



Ontario Energy Board

# Revenue Requirement Workform (RRWF) for 2021 Filers



Version 1.00

<b>Utility Name</b>	Oshawa PUC Networks Inc.
<b>Service Territory</b>	Oshawa
<b>Assigned EB Number</b>	EB-2020-0048
<b>Name and Title</b>	David Savage, Corporate Controller
<b>Phone Number</b>	(905) 743 5219
<b>Email Address</b>	<a href="mailto:dsavage@opuc.on.ca">dsavage@opuc.on.ca</a>
<b>Test Year</b>	<a href="#">2021</a>
<b>Bridge Year</b>	<a href="#">2020</a>
<b>Last Rebasing Year</b>	<a href="#">2019</a>

The RRWF has been enhanced commencing with 2017 rate applications to provide estimated base distribution rates. The enhanced RRWF is not intended to replace a utility's formal rate generator model which should continue to be the source of the proposed rates as well as the final ones at the conclusion of the proceeding. The load forecasting addition made to this model is intended to be demonstrative only and does not replace the information filed in the utility's application. In an effort to minimize the incremental work required from utilities, the cost allocation and rate design additions to this model do in fact replace former appendices that were required to be filed as part of the cost of service (Chapter 2) filing requirements.






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# Revenue Requirement Workform (RRWF) for 2021 Filers

- |                                      |  |
|--------------------------------------|--|
| <a href="#">1. Info</a>              | <a href="#">8. Rev. Def. Suff</a>                          |
| <a href="#">2. Table of Contents</a> | <a href="#">9. Rev. Reqt</a>                               |
| <a href="#">3. Data Input Sheet</a>  | <a href="#">10. Load Forecast</a>                          |
| <a href="#">4. Rate Base</a>         | <a href="#">11. Cost Allocation</a>                        |
| <a href="#">5. Utility Income</a>    | <a href="#">12. Residential Rate Design</a>                |
| <a href="#">6. Taxes PILs</a>        | <a href="#">13. Rate Design and Revenue Reconciliation</a> |
| <a href="#">7. Cost of Capital</a>   | <a href="#">14. Tracking Sheet</a>                         |

**Notes:**

- (1) Pale green cells represent inputs
- (2) Pale green boxes at the bottom of each page are for additional notes
- (3) Pale yellow cells represent drop-down lists
- (4) **Please note that this model uses MACROS. Before starting, please ensure that macros have been enabled.**
- (5) **Completed versions of the Revenue Requirement Work Form are required to be filed in working Microsoft Excel format.**

 Ontario Energy Board

# Revenue Requirement Workform (RRWF) for 2021 Filers

Data Input <sup>(1)</sup>

	Initial Application <sup>(2)</sup>					Per Board Decision
<b>1 Rate Base</b>						
Gross Fixed Assets (average)	\$239,332,460			\$ 239,332,460		\$239,332,460
Accumulated Depreciation (average)	(\$102,028,819) <sup>(5)</sup>			(\$102,028,819)		(\$102,028,819)
<b>Allowance for Working Capital:</b>						
Controllable Expenses	\$14,294,020			\$ 14,294,020		\$14,294,020
Cost of Power	\$121,274,382			\$ 121,274,382		\$121,274,382
Working Capital Rate (%)	7.50% <sup>(9)</sup>					
<b>2 Utility Income</b>						
Operating Revenues:						
Distribution Revenue at Current Rates	\$25,918,610					
Distribution Revenue at Proposed Rates	\$27,350,082					
<b>Other Revenue:</b>						
Specific Service Charges	\$770,659					
Late Payment Charges	\$257,473					
Other Distribution Revenue	\$197,418					
Other Income and Deductions	\$74,431					
Total Revenue Offsets	\$1,299,981 <sup>(7)</sup>					
<b>Operating Expenses:</b>						
OM+A Expenses	\$14,107,550			\$ 14,107,550		\$14,107,550
Depreciation/Amortization	\$6,216,997			\$ 6,216,997		\$6,216,997
Property taxes	\$152,097			\$ 152,097		\$152,097
Other expenses	\$34,374			34373.57384		\$34,374
<b>3 Taxes/PILs</b>						
Taxable Income:						
	(\$5,620,936) <sup>(3)</sup>					
Adjustments required to arrive at taxable income						
<b>Utility Income Taxes and Rates:</b>						
Income taxes (not grossed up)	\$ -					
Income taxes (grossed up)	\$ -					
Federal tax (%)	0.00%					
Provincial tax (%)	15.00%					
Income Tax Credits	\$ -					
<b>4 Capitalization/Cost of Capital</b>						
<b>Capital Structure:</b>						
Long-term debt Capitalization Ratio (%)	56.0%					
Short-term debt Capitalization Ratio (%)	4.0% <sup>(8)</sup>					
Common Equity Capitalization Ratio (%)	40.0%					
Preferred Shares Capitalization Ratio (%)	0.0%					
	100.0%			100.0%		100.0%
<b>Cost of Capital</b>						
Long-term debt Cost Rate (%)	3.57%					
Short-term debt Cost Rate (%)	2.75%					
Common Equity Cost Rate (%)	8.52%					
Preferred Shares Cost Rate (%)	0.00%					

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# Revenue Requirement Workform (RRWF) for 2021 Filers

## Rate Base and Working Capital

Line No.	Particulars	Initial Application				Per Board Decision
1	Gross Fixed Assets (average) <sup>(2)</sup>	\$239,332,460	\$ -	\$239,332,460	\$ -	\$239,332,460
2	Accumulated Depreciation (average) <sup>(2)</sup>	(\$102,028,819)	\$ -	(\$102,028,819)	\$ -	(\$102,028,819)
3	Net Fixed Assets (average) <sup>(2)</sup>	\$137,303,641	\$ -	\$137,303,641	\$ -	\$137,303,641
4	Allowance for Working Capital <sup>(1)</sup>	\$10,167,630	#####	\$ -	\$ -	\$ -
5	<b>Total Rate Base</b>	<b>\$147,471,271</b>	<b>#####</b>	<b>\$137,303,641</b>	<b>\$ -</b>	<b>\$137,303,641</b>

### (1) Allowance for Working Capital - Derivation

6	Controllable Expenses	\$14,294,020	\$ -	\$14,294,020	\$ -	\$14,294,020
7	Cost of Power	\$121,274,382	\$ -	\$121,274,382	\$ -	\$121,274,382
8	Working Capital Base	\$135,568,402	\$ -	\$135,568,402	\$ -	\$135,568,402
9	Working Capital Rate % <sup>(1)</sup>	7.50%	-7.50%	0.00%	0.00%	0.00%
10	Working Capital Allowance	\$10,167,630	#####	\$ -	\$ -	\$ -

#### Notes

- (1) Some Applicants may have a unique rate as a result of a lead-lag study. The default rate for 2021 cost of service applications is 7.5%, per the letter issued by the Board on June 3, 2015.
- (2) Average of opening and closing balances for the year.



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## Revenue Requirement Workform (RRWF) for 2021 Filers

### Utility Income

Line No.	Particulars	Initial Application					Per Board Decision
<b>Operating Revenues:</b>							
1	Distribution Revenue (at Proposed Rates)	\$27,350,082		(\$27,350,082)		\$ -	\$ -
2	Other Revenue <sup>(1)</sup>	\$1,299,981		(\$1,299,981)		\$ -	\$ -
3	Total Operating Revenues	\$28,650,062		(\$28,650,062)		\$ -	\$ -
<b>Operating Expenses:</b>							
4	OM+A Expenses	\$14,107,550		\$ -		\$14,107,550	\$14,107,550
5	Depreciation/Amortization	\$6,216,997		\$ -		\$6,216,997	\$6,216,997
6	Property taxes	\$152,097		\$ -		\$152,097	\$152,097
7	Capital taxes	\$ -		\$ -		\$ -	\$ -
8	Other expense	\$34,374		\$ -		\$34,374	\$34,374
9	Subtotal (lines 4 to 8)	\$20,511,017		\$ -		\$20,511,017	\$20,511,017
10	Deemed Interest Expense	\$3,113,225		(\$3,113,225)		\$ -	\$ -
11	Total Expenses (lines 9 to 10)	\$23,624,242		(\$3,113,225)		\$20,511,017	\$20,511,017
12	Utility income before income taxes	\$5,025,821		(\$25,536,838)		(\$20,511,017)	(\$20,511,017)
13	Income taxes (grossed-up)	\$ -		\$ -		\$ -	\$ -
14	Utility net income	\$5,025,821		(\$25,536,838)		(\$20,511,017)	(\$20,511,017)

### Notes

#### Other Revenues / Revenue Offsets

<sup>(1)</sup>							
Specific Service Charges	\$770,659			\$ -			\$ -
Late Payment Charges	\$257,473			\$ -			\$ -
Other Distribution Revenue	\$197,418			\$ -			\$ -
Other Income and Deductions	\$74,431			\$ -			\$ -
Total Revenue Offsets	\$1,299,981		\$ -		\$ -	\$ -	\$ -



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# Revenue Requirement Workform (RRWF) for 2021 Filers

## Taxes/PILs

Line No.	Particulars	Application				Per Board Decision	
<u>Determination of Taxable Income</u>							
1	Utility net income before taxes	\$5,025,821		\$ -		\$ -	
2	Adjustments required to arrive at taxable utility income	(\$5,620,936)		\$ -		\$ -	
3	Taxable income	(\$595,115)		\$ -		\$ -	
<u>Calculation of Utility income Taxes</u>							
4	Income taxes	\$ -		\$ -		\$ -	
6	Total taxes	\$ -		\$ -		\$ -	
7	Gross-up of Income Taxes	\$ -		\$ -		\$ -	
8	Grossed-up Income Taxes	\$ -		\$ -		\$ -	
9	PILs / tax Allowance (Grossed-up Income taxes + Capital taxes)	\$ -		\$ -		\$ -	
10	Other tax Credits	\$ -		\$ -		\$ -	
<u>Tax Rates</u>							
11	Federal tax (%)	0.00%		0.00%		0.00%	
12	Provincial tax (%)	15.00%		15.00%		15.00%	
13	Total tax rate (%)	15.00%		15.00%		15.00%	

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# Revenue Requirement Workform (RRWF) for 2021 Filers

## Revenue Deficiency/Sufficiency

Line No.	Particulars	Initial Application		Per Board Decision		Per Board Decision	
		At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates
1	Revenue Deficiency from Below		\$1,684,085		(\$6,361,874)		\$24,130,608
2	Distribution Revenue	\$25,918,610	\$25,665,997	\$25,918,610	\$33,711,955	\$ -	(\$24,130,608)
3	Other Operating Revenue Offsets - net	\$1,299,981	\$1,299,981	\$ -	\$ -	\$ -	\$ -
4	<b>Total Revenue</b>	<b>\$27,218,590</b>	<b>\$28,650,062</b>	<b>\$25,918,610</b>	<b>\$27,350,082</b>	<b>\$ -</b>	<b>\$ -</b>
5	Operating Expenses	\$20,511,017	\$20,511,017	\$20,511,017	\$20,511,017	\$20,511,017	\$20,511,017
6	Deemed Interest Expense	\$3,113,225	\$3,113,225	\$ -	\$ -	\$ -	\$ -
8	<b>Total Cost and Expenses</b>	<b>\$23,624,242</b>	<b>\$23,624,242</b>	<b>\$20,511,017</b>	<b>\$20,511,017</b>	<b>\$20,511,017</b>	<b>\$20,511,017</b>
9	<b>Utility Income Before Income Taxes</b>	<b>\$3,594,349</b>	<b>\$5,025,821</b>	<b>\$5,407,593</b>	<b>\$6,839,065</b>	<b>(\$20,511,017)</b>	<b>(\$20,511,017)</b>
10	Tax Adjustments to Accounting Income per 2013 PILs model	(\$5,620,936)	(\$5,620,936)	(\$5,620,936)	(\$5,620,936)	\$ -	\$ -
11	<b>Taxable Income</b>	<b>(\$2,026,587)</b>	<b>(\$595,115)</b>	<b>(\$213,343)</b>	<b>\$1,218,129</b>	<b>(\$20,511,017)</b>	<b>(\$20,511,017)</b>
12	Income Tax Rate	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
13	<b>Income Tax on Taxable Income</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$182,719</b>	<b>\$ -</b>	<b>\$ -</b>
14	<b>Income Tax Credits</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
15	<b>Utility Net Income</b>	<b>\$3,594,349</b>	<b>\$5,025,821</b>	<b>\$5,407,593</b>	<b>(\$20,511,017)</b>	<b>(\$20,511,017)</b>	<b>(\$20,511,017)</b>
16	<b>Utility Rate Base</b>	<b>\$147,471,271</b>	<b>\$147,471,271</b>	<b>\$137,303,641</b>	<b>\$137,303,641</b>	<b>\$137,303,641</b>	<b>\$137,303,641</b>
17	Deemed Equity Portion of Rate Base	\$58,988,508	\$58,988,508	\$ -	\$ -	\$ -	\$ -
18	Income/(Equity Portion of Rate Base)	6.09%	8.52%	0.00%	0.00%	0.00%	0.00%
19	Target Return - Equity on Rate Base	8.52%	8.52%	0.00%	0.00%	0.00%	0.00%
20	Deficiency/Sufficiency in Return on Equity	-2.43%	0.00%	0.00%	0.00%	0.00%	0.00%
21	Indicated Rate of Return	4.55%	5.52%	3.94%	0.00%	-14.94%	0.00%
22	Requested Rate of Return on Rate Base	5.52%	5.52%	0.00%	0.00%	0.00%	0.00%
23	Deficiency/Sufficiency in Rate of Return	-0.97%	0.00%	3.94%	0.00%	-14.94%	0.00%
24	Target Return on Equity	\$5,025,821	\$5,025,821	\$ -	\$ -	\$ -	\$ -
25	Revenue Deficiency/(Sufficiency)	\$1,431,472	(\$0)	(\$5,407,593)	\$ -	\$20,511,017	\$ -
26	<b>Gross Revenue Deficiency/(Sufficiency)</b>	<b>\$1,684,085 <sup>(1)</sup></b>		<b>(\$6,361,874) <sup>(1)</sup></b>		<b>\$24,130,608 <sup>(1)</sup></b>	

Notes:

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Ontario Energy Board

# Revenue Requirement Workform (RRWF) for 2021 Filers

## Revenue Requirement

Line No.	Particulars	Application				Per Board Decision	
1	OM&A Expenses	\$14,107,550		\$14,107,550		\$14,107,550	
2	Amortization/Depreciation	\$6,216,997		\$6,216,997		\$6,216,997	
3	Property Taxes	\$152,097		\$152,097		\$152,097	
5	Income Taxes (Grossed up)	\$ -		\$ -		\$ -	
6	Other Expenses	\$34,374		\$34,374		\$34,374	
7	Return						
	Deemed Interest Expense	\$3,113,225		\$ -		\$ -	
	Return on Deemed Equity	\$5,025,821		\$ -		\$ -	
8	<b>Service Revenue Requirement (before Revenues)</b>	<u>\$28,650,063</u>		<u>\$20,511,017</u>		<u>\$20,511,017</u>	
9	Revenue Offsets	\$1,299,981		\$ -		\$ -	
10	<b>Base Revenue Requirement (excluding Transformer Ownership Allowance credit adjustment)</b>	<u>\$27,350,082</u>		<u>\$20,511,017</u>		<u>\$20,511,017</u>	
11	Distribution revenue	\$27,350,082		\$ -		\$ -	
12	Other revenue	\$1,299,981		\$ -		\$ -	
13	<b>Total revenue</b>	<u>\$28,650,062</u>		<u>\$ -</u>		<u>\$ -</u>	
14	<b>Difference (Total Revenue Less Distribution Revenue Requirement before Revenues)</b>	<u>(\$0)</u>	<sup>(1)</sup>	<u>(\$20,511,017)</u>	<sup>(1)</sup>	<u>(\$20,511,017)</u>	<sup>(1)</sup>

Summary Table of Revenue Requirement and Revenue Deficiency/Sufficiency

	Application		Δ% <sup>(2)</sup>	Per Board Decision	Δ% (2)
Service Revenue Requirement	\$28,650,063	\$20,511,017	(\$0)	\$20,511,017	(\$1)
Grossed-Up Revenue					
Deficiency/(Sufficiency)	\$1,684,085	(\$6,361,874)	(\$5)	\$24,130,608	(\$1)
Base Revenue Requirement (to be recovered from Distribution Rates)	\$27,350,082	\$20,511,017	(\$0)	\$20,511,017	(\$1)
Revenue Deficiency/(Sufficiency) Associated with Base Revenue Requirement	\$1,431,472	\$ -	(\$1)	\$ -	(\$1)

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