BEFORE THE PUBLIC UTILTIY COMMISSION

OF OREGON

UM 1893

In the Matter of PUBLIC UTILITY COMMISSION OF OREGON Investigation into the Methodology and Process for Developing Avoided Costs Used in Energy Efficiency Cost-Effectiveness Test	STAFF REQUESTS COMMENT FROM INTERSTED PARTIES

Staff of the Public Utility Commission of Oregon (OPUC Staff or Staff) seeks input from stakeholders on proposed changes to data collection workbooks used by Energy Trust of Oregon (Energy Trust) for energy efficiency avoided cost calculations. On June 25, 2020 OPUC Staff requested suggestions for topics that may lead to modifications to the data collection workbooks. Staff received one response from Northwest Natural with some suggestions for clarity and efficiency in the natural gas workbook. Staff worked with Energy Trust to implement these suggestions where appropriate in a draft version of a new workbook. Staff has summarized these points below, with the locations of relevant changes.

Staff requests that stakeholders review these changes and provide any comments by July 29, 2020.

Please submit comments to the Commission's Filing Center at puc.filingcenter@state.or.us. If you prefer not to comment on a particular question, please respond that you are choosing not to take a position on that issue at this time.

Dated this 17th day of July 2020, Salem, Oregon.

/s/ Anna Kim

Anna Kim Senior Utility Analyst

Proposed modifications to natural gas data collection workbook for energy efficiency avoided costs

As a reminder, sheets 1a-6a are the forms for alternate, additional submissions that are copies of the main form found in sheets 1-6.

Real vs. Nominal
Northwest Natural notes that some of the table columns were improperly labeled, assuming real dollars even though the form gives the option to use real or nominal. Staff agrees. Corrections were added to the workbook to properly reflect real vs. nominal dollars in the following locations:
Sheet "2) Commodity & Transport – IRP" - CELL A7
Sheet "3) Environ. Compliance – IRP" – CELLS C9 and E9
Sheet "4) Infrastruct. Capacity – IRP" – CELLS C10, D10, and E10
Sheet "5) Risk Reduction – IRP" – CELL C9
Corresponding alternate submission sheets 2a, 3a, 4a, 5a

End Use Profiles
Northwest Natural proposes re-wording "End Use Load Profiles" to "End Use Savings Profiles" to distinguish the fact that a reduction in load may not be equivalent to acquiring savings. Staff agrees that there is a distinction to be made. Further, Staff will accept submissions derived from either loads or savings, and opted to rename "End Use Load Profiles" to "End Use Profiles" in the following locations:

Sheet "6) End Use Load Profiles – IRP" has been changed to "6) End Use Profiles – IRP"
Sheet "6) End Use Profiles – IRP" – CELL B7
Corresponding alternate submission sheet 6a

System Peak Coincident Factors
Northwest Natural notes that it does not use system peak coincident factors for its calculations and suggests removal if these factors are not in use. Staff clarifies that this can be used by other utilities. The workbook has been updated to reflect that these numbers are optional in the following location:

Sheet "1) Global Inputs – IRP" - CELLS B17 and B19
Corresponding alternate submission sheet 1a

Inflation Rate
Northwest Natural asked for clarification on whether Energy Trust uses inflation rates from individual utilities. Currently, this is the case and consequently no changes have been made regarding inflation in the workbooks.

Instructions
The instructions sheet has been updated to reflect the relevant above changes as well as other minor clarifications.

Energy Efficiency Avoided Cost Submission Template - Natural Gas

Utility Name: Please Select

Submission Date: Fill

Instructions and Definitions

<> Please fill out this workbook as completely as possible and per the instructions.
<> Inputs will be reviewed and approved by the OPUC before being sent to the Energy Trust of Oregon for use in Avoided Cost development.
<> **Provide as much detail as possible when sourcing** data inputs, including the link to the source (if available), page number and table or graph number.
This will increase the efficiency of this process and require less iteration during the OPUC review period.
For worksheets 1,2,3,4,5,6 refer to data presented in the most recently acknowledged IRP, IRP Update, or General Rate Case unless otherwise noted.

1) Global Inputs - IRP

<> Standard economic assumptions of the avoided costs are input into this tab, including inflation and discount rates, as well as real dollar year and forecast start year.
<> If supply or distribution capacity values were proportioned using a system peak coincident factor, please provide the system peak definition of the utility (calendar Month/Day/Hour) and the peak-day/annual load and peak-hour/Annual Load Ratios for the utility system.
<> Note that in tabs 2-6, calendar start year and input table titles are calculated fields that pull from the global input tab, so these must be populated.
<> Ensure that the dollar years of the data inputs match the source - Energy Trust will inflate to the proper year.

2) Commodity and Transport - IRP

<> Provide Commidity and Transport price forecast by month.
<> Indicate if the forecast is in nominal or real dollars (if real, dollar value will populate headers from Global Inputs tab).

3) Environmental Compliance - IRP

<> Provide the $/Metric Ton of CO2 assumed for each year of the forecast.
<> Provide the metric ton of CO2/dekatherm assumed for each year of the forecast.
<> Column 'F' is a calculated field, which multiplies the $/metric ton of CO2 by the CO2/dekatherm.

4) Infrastructure Capacity - IRP

<> Provide the Supply Infrastructure Capacity Cost in a $/Dth/Day format for each year available of the forecast period.
<> Provide the Distribution Infrastructure Capacity Cost in a $/Dth/Day and $/Dth/Hour format for each year available of the forecast period.
<> If supply or distribution capacity values were proportioned using a system peak coincident factor, please provide the corresponding system peak coincident factor in "Global Inputs - IRP" tab on rows 17 and 19.

5) Risk Reduction - IRP

<> Provide the Risk Reduction value in a $/Dth format if available for each year available of the forecast period.
<> The box in cell C7 calculates the levelized net present value of all years of the forecast period. This is used when negative values occur in any year of the forecast period. If the levelized risk reduction value is negative, zero will be assigned as the final value. This is due to the premise that the risk reduction value is meant to be a benefit.

6) End Use Profiles - IRP

<> Provide the Monthly share of annual load for the utility's system by end use, if available.
<> Provide the peak day/annual load and peak hour/annual load ratios by end use, if available.
<> End-use profiles are meant to represent the timing of savings, these can be derived from either savings profiles or load profiles.

1a, 2a, 3a, 4a, 5a, 6a) Alternative Submissions

<> These worksheets provide a location for the utility to present alternative values to those found in the most recently acknowledged IRP, IRP Update, or General Rate Case.
<> **Submissions in these tabs are not required.**
<> Provide a rationale for submitting the alternative values in the box provided at the top of each alternative worksheet.
<> If a second set of alternative values is submitted, simply copy the alt tabs necessary and rename to 1b, alt 2 in the tab name. However, note that in tabs 2-6, calendar start year and input table titles are calculated fields that pull from the global input tab. Either update these formulas or override them.

Global Assumptions Inputs			SOURCING				
			Provide as much detail as possible with sourcing including a link. Ensure that dollar years listed here are the same as the source.				
Avoided Cost Element	**Units**	**Value**	**Source**	**Source Page #**	**Table # (if applicable)**	**Source Link or File Name**	**Source Notes**
Discount Rate (Company's Real after-tax weighted average cost of capital (WACC)	Percent						
Inflation Rate	Percent						
Regional Act Credit	Percent	10.00%	N/A				
Forecast Period Calendar Start Year	Year						
Real Dollar Base Year	Year						
System Peak Definition	Calendar Month/Day/Hour						
System Peak Coincident Day Factor (if needed)	Peak Day/Annual Load Ratio						
System Peak Coincident Hour Factor (if needed)	Peak Hour/Annual Load Ratio						

Commodity Price Inputs

Real or Nominal?	
Source and Pg #:	
Source Link or File Name:	
Source Notes:	

Gas Commodity and Transportation/Storage Costs - ($/Dth)

Year #	Calendar Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0												
2	1												
3	2												
4	3												
5	4												
6	5												
7	6												
8	7												
9	8												
10	9												
11	10												
12	11												
13	12												
14	13												
15	14												
16	15												
17	16												
18	17												
19	18												
20	19												
21	20												
22	21												
23	22												
24	23												
25	24												
26	25												
27	26												
28	27												
29	28												
30	29												
31	30												
32	31												
33	32												
34	33												
35	34												
36	35												
37	36												
38	37												
39	38												
40	39												
41	40												
42	41												
43	42												
44	43												
45	44												

Environmental Compliance Cost Inputs

Real or Nominal?	
Source and Pg #:	
Source Link or File Name:	
Source Notes:	

Environmental Compliance Cost

Year #	Calendar Year	Environmental Compliance Cost ($/MTCO2e)	Carbon Intesity (MTCO2e/Dth)	Environmental Compliance Cost ($/Dth)
1	0			$0.000
2	1			$0.000
3	2			$0.000
4	3			$0.000
5	4			$0.000
6	5			$0.000
7	6			$0.000
8	7			$0.000
9	8			$0.000
10	9			$0.000
11	10			$0.000
12	11			$0.000
13	12			$0.000
14	13			$0.000
15	14			$0.000
16	15			$0.000
17	16			$0.000
18	17			$0.000
19	18			$0.000
20	19			$0.000
21	20			$0.000
22	21			$0.000
23	22			$0.000
24	23			$0.000
25	24			$0.000
26	25			$0.000
27	26			$0.000
28	27			$0.000
29	28			$0.000
30	29			$0.000
31	30			$0.000
32	31			$0.000
33	32			$0.000
34	33			$0.000
35	34			$0.000
36	35			$0.000
37	36			$0.000
38	37			$0.000
39	38			$0.000
40	39			$0.000
41	40			$0.000
42	41			$0.000
43	42			$0.000
44	43			$0.000
45	44			$0.000

Infrastructure Capacity Cost Inputs

Real or Nominal?	
Source and Pg #:	
Source Link or File Name:	
Source Notes:	

Infrastructure Capacity Costs

		Infrastructure Capacity Costs		
Year #	**Calendar Year**	**Supply $/Dth/Day**	**Distribution Peak DAY ($/Dth/Day)**	**Distribution Peak HOUR ($/Dth/Hour)**
1	0			
2	1			
3	2			
4	3			
5	4			
6	5			
7	6			
8	7			
9	8			
10	9			
11	10			
12	11			
13	12			
14	13			
15	14			
16	15			
17	16			
18	17			
19	18			
20	19			
21	20			
22	21			
23	22			
24	23			
25	24			
26	25			
27	26			
28	27			
29	28			
30	29			
31	30			
32	31			
33	32			
34	33			
35	34			
36	35			
37	36			
38	37			
39	38			
40	39			
41	40			
42	41			
43	42			
44	43			
45	44			

Risk Reduction Value Inputs

Real or Nominal?	
Source and Pg #:	
Source Link or File Name:	
Source Notes:	

Risk Reduction Value

No Data Entered = Levelized Risk Reduction Value (for use when negative values occur in any years of the forecast period). If this value is negative, then zero will be assigned as the final value.

Year #	Calendar Year	Risk Reduction Value ($/Dth)
1	0	
2	1	
3	2	
4	3	
5	4	
6	5	
7	6	
8	7	
9	8	
10	9	
11	10	
12	11	
13	12	
14	13	
15	14	
16	15	
17	16	
18	17	
19	18	
20	19	

End Use Profiles & Peak Day/Hour Ratios

Source and Pg # and/or Table #:	
Source Link or File Name:	
Source Notes:	

End Use Profiles	Monthly Share of Normal Weather Annual Load												Peak to Annual Normal Weather Usage Ratios	
End Use	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Peak Day	Peak Hour

Notes:
Energy Trust will work with Utility and OPUC Staff to determine the most appropriate load or savings profiles and peak factors to use, whether that is utility specific values or Northwest Power and Conservation Council proxies. In order for utility-specific values to be used, utility staff must review the methodology they used to develop the values with OPUC Staff.

Alternative Submissions	Rationale for alternative submission: *Provide an overall rationale for providing alternative values - use the 'Source Notes/Rationale' column to provide more detailed rational for individual inputs.*

Global Assumptions Inputs			SOURCING *Provide as much detail as possible with sourcing including a link. Ensure that dollar years listed here are the same as the source.*				
Avoided Cost Element	**Units**	**Value**	**Source**	**Source Page #**	**Table # (if applicable)**	**Source Link or File Name**	**Source Notes**
Discount Rate (Company's Real after-tax weighted average cost of capital (WACC)	Percent						
Inflation Rate	Percent						
Regional Act Credit	Percent	10.00%	N/A				
Forecast Period Calendar Start Year	Year	2020					
Real Dollar Base Year	Year	2020					

Alternative Submissions	Rationale for alternative submission: *Provide an overall rationale for providing alternative values using this box*

Commodity Price Inputs

Real or Nominal?	
Source and Pg #:	
Source Link or File Name:	
Source Notes:	

Gas Commodity and Transportation/Storage Costs ($/Dth)

Year #	Calendar Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2020												
2	2021												
3	2022												
4	2023												
5	2024												
6	2025												
7	2026												
8	2027												
9	2028												
10	2029												
11	2030												
12	2031												
13	2032												
14	2033												
15	2034												
16	2035												
17	2036												
18	2037												
19	2038												
20	2039												
21	2040												
22	2041												
23	2042												
24	2043												
25	2044												
26	2045												
27	2046												
28	2047												
29	2048												
30	2049												
31	2050												
32	2051												
33	2052												
34	2053												
35	2054												
36	2055												
37	2056												
38	2057												
39	2058												
40	2059												
41	2060												
42	2061												
43	2062												
44	2063												
45	2064												

Alternative Submissions	**Rationale for alternative submission:** *Provide an overall rationale for providing alternative values using this box*

Environmental Compliance Cost Inputs

Real or Nominal?	
Source and Pg #:	
Source Link or File Name:	
Source Notes:	

Environmental Compliance Cost

Year #	Calendar Year	Environmental Compliance Cost ($/MTCO2e)	Carbon Intesity (MTCO2e/Dth)	Environmental Compliance Cost ($/Dth)
1	2020			$0.000
2	2021			$0.000
3	2022			$0.000
4	2023			$0.000
5	2024			$0.000
6	2025			$0.000
7	2026			$0.000
8	2027			$0.000
9	2028			$0.000
10	2029			$0.000
11	2030			$0.000
12	2031			$0.000
13	2032			$0.000
14	2033			$0.000
15	2034			$0.000
16	2035			$0.000
17	2036			$0.000
18	2037			$0.000
19	2038			$0.000
20	2039			$0.000
21	2040			$0.000
22	2041			$0.000
23	2042			$0.000
24	2043			$0.000
25	2044			$0.000
26	2045			$0.000
27	2046			$0.000
28	2047			$0.000
29	2048			$0.000
30	2049			$0.000
31	2050			$0.000
32	2051			$0.000
33	2052			$0.000
34	2053			$0.000
35	2054			$0.000
36	2055			$0.000
37	2056			$0.000
38	2057			$0.000
39	2058			$0.000
40	2059			$0.000
41	2060			$0.000
42	2061			$0.000
43	2062			$0.000
44	2063			$0.000
45	2064			$0.000

Alternative Submissions	**Rationale for alternative submission:** *Provide an overall rationale for providing alternative values using this box*

Infrastructure Capacity Cost Inputs

Real or Nominal?	
Source and Pg #:	
Source Link or File Name:	
Source Notes:	

Infrastructure Capacity Costs

		Infrastructure Capacity Costs		
Year #	**Calendar Year**	**Supply ($/Dth/Day)**	**Distribution Peak DAY ($/Dth/Day)**	**Distribution Peak HOUR ($/Dth/Hour)**
1	2020			
2	2021			
3	2022			
4	2023			
5	2024			
6	2025			
7	2026			
8	2027			
9	2028			
10	2029			
11	2030			
12	2031			
13	2032			
14	2033			
15	2034			
16	2035			
17	2036			
18	2037			
19	2038			
20	2039			
21	2040			
22	2041			
23	2042			
24	2043			
25	2044			
26	2045			
27	2046			
28	2047			
29	2048			
30	2049			
31	2050			
32	2051			
33	2052			
34	2053			
35	2054			
36	2055			
37	2056			
38	2057			
39	2058			
40	2059			
41	2060			
42	2061			
43	2062			
44	2063			
45	2064			

Alternative Submissions	Rationale for alternative submission: *Provide an overall rationale for providing alternative values using this box*

Risk Reduction Value Inputs

Real or Nominal?	
Source and Pg #:	
Source Link or File Name:	
Source Notes:	

Risk Reduction Value

No Data Entered = Levelized Risk Reduction Value (for use when negative values occur in any years of the forecast period). If this value is negative, then zero will be assigned as the final value.

Year #	Calendar Year	Risk Reduction Value ($/Dth)
1	2020	
2	2021	
3	2022	
4	2023	
5	2024	
6	2025	
7	2026	
8	2027	
9	2028	
10	2029	
11	2030	
12	2031	
13	2032	
14	2033	
15	2034	
16	2035	
17	2036	
18	2037	
19	2038	
20	2039	

Alternative Submissions

Rationale for alternative submission:
Provide an overall rationale for providing alternative values using this box

End Use Profiles & Peak Day/Hour Ratios

Source and Pg # and/or Table #:	
Source Link or File Name:	
Source Notes:	

End Use Profiles	**Monthly Share of Normal Weather Annual Load**												**Peak to Annual Normal Weather Usage Ratios**	
End Use	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Peak Day**	**Peak Hour**

Notes:
Energy Trust will work with Utility and OPUC Staff to determine the most appropriate load or savings profiles and peak factors to use, whether that is utility specific values or Northwest Power and Conservation Council proxies. In order for utility-specific values to be used, utility staff must review the methodology they used to develop the values with OPUC Staff.