

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

v.

AVISTA CORPORATION, D/B/A
AVISTA UTILITIES,

Respondent

DOCKETS UE-240006
& UG-240007

EXHIBIT LDK-3
DISCOVERY RESPONSES

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	WASHINGTON	DATE PREPARED:	05/14/2024
CASE NO:	UE-240006 & UG-240007	WITNESS:	Scott Kinney
REQUESTER:	AWEC	RESPONDER:	James Gall
TYPE:	Data Request	DEPT:	Energy Resources
REQUEST NO.:	AWEC – 080	TELEPHONE:	(509) 495-2189
		EMAIL:	james.gall@avistacorp.com

SUBJECT: Cost of Service

REQUEST:

Please provide documentation of Avista’s resource adequacy by month from January 1, 2020, to December 31, 2025. Please include all supporting workpapers used to calculate resource adequacy.

RESPONSE:

Please see Avista’s **CONFIDENTIAL** response to data request AWEC-DR-080C. Please note that Avista’s response to AWEC-DR-080C is **Confidential per Protective Order in UTC Dockets UE-240006 and UG-240007**.

Attached are two versions of Avista’s Load and Resource Position

File “AWEC-DR-080C Confidential Attachment A” is the company’s expected energy and capacity position in the middle of 2019 forecasting out from 2019 to 2045.

File “AWEC-DR-080C Confidential Attachment B” is the company’s expected energy and capacity position in the beginning of 2022 forecasting out from 2022 to 2045. This L&R is the basis of the 2022 All Source RFP

File “AWEC-DR-080C Confidential Attachment C” is the company’s most recent expected energy and capacity position to be used as input in the 2025 IRP.

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	WASHINGTON	DATE PREPARED:	05/15/2024
CASE NO:	UE-240006 & UG-240007	WITNESS:	Clint Kalich
REQUESTER:	AWEC	RESPONDER:	James Gall
TYPE:	Data Request	DEPT:	Energy Resources
REQUEST NO.:	AWEC – 081	TELEPHONE:	(509) 495-2189
		EMAIL:	james.gall@avistacorp.com

SUBJECT: Cost of Service

REQUEST:

Please refer to Avista’s 2023 IRP Executive Summary page i. Please identify all new or renewed resources, both contracted and owned, from January 1, 2020, to present. Please include all resources with planned start dates prior to January 1, 2030. For each resource provide the following information:

- a. Nameplate capacity,
- b. ELCC or QCC by month or season,
- c. Ownership status, and
- d. Start date of resource.

RESPONSE:

Below is an update to the generating resources included from the executive summary of the 2023 IRP. Resources do not include demand response or resource renewed from qualify resource contracts under PURPA.

Name	Nameplate (MW)	Ownership Status	Start Date
Rattlesnake Wind	144	PPA	12/2020
Chelan PUD	87.5	PPA	1/1/2024
Chelan PUD	87.5	PPA	1/1/2026
Russell D Smith	6.1	PPA	1/1/2023
EBC 4.6	2.2	PPA	5/1/2023
Summer Falls	94	PPA	1/1/2025
PEC 66	2.4	PPA	3/1/2025
Quincy Shute	9.4	PPA	10/1/2025
Main Canal	26	PPA	1/1/2027
PEC Headworks	6.2	PPA	9/1/2030
Clearwater Wind	100	PPA	9/2024
Lancaster	283	PPA	10/1/2026
Post Falls	TBD	Ownership	2029

The QCCs for Winter months is from the Winter 24/25 forward showing. For summer months it is from Summer 2024 forward showing. The items in blue are estimates and are until the final WRAP values are determined in a future forward showing. Months of April, May, and October are not covered by the WRAP.

Resource	Nov	Dec	Jan	Feb	Mar	Jun	Jul	Aug	Sep
Rattlesnake Wind	12.9	11.5	8.6	13.2	23.7	29.8	30.5	26.7	28.3
Chelan PUD	63.2	63.6	64.7	63.6	69.4	63.1	69.5	69.3	67.3
Chelan PUD	63.2	63.6	64.7	63.6	69.4	63.1	69.5	69.3	67.3
Russell D Smith	0	0	0	0	0	1.4	2.3	2.1	1.6
EBC 4.6	0	0	0	0	0	0.6	0.8	0.9	0.9
Summer Falls	0	0	0	0	0	63.1	69.5	69.3	67.3
PEC 66	0	0	0	0	0	1.5	1.4	1.2	1.2
Quincy Shute	0	0	0	0	0	6.8	6.8	6.6	6.9
Main Canal	0	0	0	0	0	23.4	24.4	21.9	18.1
PEC Headworks	0	0	0	0	0	5.4	4.4	3.3	2.1
Clearwater Wind	42.4	43.1	27.3	21.3	35.8	19.8	13.8	14.4	12.0
Lancaster	281.7	281.7	281.7	281.7	281.7	246.8	246.8	246.8	246.8
Post Falls	8.4	12.0	9.7	10.6	11.4	8.1	4.9	2.5	2.8

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	WASHINGTON	DATE PREPARED:	05/15/2024
CASE NO:	UE-240006 & UG-240007	WITNESS:	Clint Kalich
REQUESTER:	AWEC	RESPONDER:	James Gall
TYPE:	Data Request	DEPT:	Energy Resources
REQUEST NO.:	AWEC – 082	TELEPHONE:	(509) 495-2189
		EMAIL:	james.gall@avistacorp.com

SUBJECT: Cost of Service

REQUEST:

Please provide the capacity contribution to system peak, or ELCC, used in Avista's 2023 IRP for each solar, wind, and battery resource option.

RESPONSE:

The assumed values are included in AWEC-DR-082 Attachment A.

AWEC DR-082 Attachment A

Resource Name	QCC Value												Change in QCC Value Each Year																						
	January	February	March	April	May	June	July	August	September	October	November	December	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
NW Wind On System	8%	11%	13%	10%	10%	19%	22%	18%	13%	10%	10%	9%	100%	99%	98%	96%	95%	94%	93%	92%	91%	89%	88%	87%	86%	85%	84%	83%	82%	81%	80%	79%	78%	77%	76%
NW Wind Off System	8%	11%	13%	10%	10%	19%	22%	18%	13%	10%	10%	9%	100%	99%	98%	96%	95%	94%	93%	92%	91%	89%	88%	87%	86%	85%	84%	83%	82%	81%	80%	79%	78%	77%	76%
Wind Mantara	20%	22%	20%	20%	20%	13%	12%	13%	14%	20%	30%	29%	100%	99%	98%	96%	95%	94%	93%	92%	91%	89%	88%	87%	86%	85%	84%	83%	82%	81%	80%	79%	78%	77%	76%
Off Shore Wind Island	16%	22%	20%	20%	20%	13%	12%	13%	14%	20%	30%	29%	100%	99%	98%	96%	95%	94%	93%	92%	91%	89%	88%	87%	86%	85%	84%	83%	82%	81%	80%	79%	78%	77%	76%
New Residential Solar	3%	4%	5%	5%	23%	23%	30%	24%	13%	2%	2%	3%	100%	99%	98%	97%	96%	95%	94%	93%	93%	92%	91%	90%	89%	88%	87%	86%	85%	84%	83%	82%	81%		
New Residential Storage	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	100%	99%	97%	81%	75%	70%	65%	60%	56%	52%	49%	46%	42%	39%	36%	34%	31%	29%	27%	25%	24%	22%	20%
Existing Residential Storage	3%	4%	5%	5%	23%	23%	30%	24%	13%	2%	2%	3%	100%	99%	98%	97%	96%	95%	94%	93%	93%	92%	91%	90%	89%	88%	87%	86%	85%	84%	83%	82%	81%		
Commercial Storage	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	100%	99%	97%	81%	75%	70%	65%	60%	56%	52%	49%	46%	42%	39%	36%	34%	31%	29%	27%	25%	24%	22%	20%
Solar Photovoltaic Fixed Array (5 MW AC)	3%	4%	5%	5%	23%	23%	30%	24%	13%	2%	2%	3%	100%	99%	98%	97%	96%	95%	94%	93%	93%	92%	91%	90%	89%	88%	87%	86%	85%	84%	83%	82%	81%		
Solar Photovoltaic Floating Aest Tracking (100 MW AC)	3%	4%	5%	5%	23%	23%	30%	24%	13%	2%	2%	3%	100%	99%	98%	97%	96%	95%	94%	93%	93%	92%	91%	90%	89%	88%	87%	86%	85%	84%	83%	82%	81%		
Solar Photovoltaic Floating Aest Tracking (100 MW AC)	3%	4%	5%	5%	23%	23%	30%	24%	13%	2%	2%	3%	100%	99%	98%	97%	96%	95%	94%	93%	93%	92%	91%	90%	89%	88%	87%	86%	85%	84%	83%	82%	81%		
Solar Photovoltaic Floating Aest Tracking (100 MW AC)	3%	4%	5%	5%	23%	23%	30%	24%	13%	2%	2%	3%	100%	99%	98%	97%	96%	95%	94%	93%	93%	92%	91%	90%	89%	88%	87%	86%	85%	84%	83%	82%	81%		
100 MWh/200 MWh Lithium-ion with solar	22%	21%	20%	95%	77%	77%	70%	75%	87%	98%	22%	22%	100%	99%	97%	81%	75%	70%	65%	60%	56%	52%	49%	46%	42%	39%	36%	34%	31%	29%	27%	25%	24%	22%	20%
100 MWh/200 MWh Lithium-ion with solar	17%	17%	17%	33%	32%	33%	33%	33%	33%	17%	17%	17%	100%	99%	97%	81%	75%	70%	65%	60%	56%	52%	49%	46%	42%	39%	36%	34%	31%	29%	27%	25%	24%	22%	20%
50 MWh/200 MWh Lithium-ion with solar	22%	21%	20%	95%	77%	77%	70%	75%	87%	98%	22%	22%	100%	99%	97%	81%	75%	70%	65%	60%	56%	52%	49%	46%	42%	39%	36%	34%	31%	29%	27%	25%	24%	22%	20%
Distribution Base 4hr Lithium-ion	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	100%	99%	97%	81%	75%	70%	65%	60%	56%	52%	49%	46%	42%	39%	36%	34%	31%	29%	27%	25%	24%	22%	20%
4hr Lithium-ion	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	100%	99%	97%	81%	75%	70%	65%	60%	56%	52%	49%	46%	42%	39%	36%	34%	31%	29%	27%	25%	24%	22%	20%
8hr Lithium-ion	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	100%	99%	97%	81%	75%	70%	65%	60%	56%	52%	49%	46%	42%	39%	36%	34%	31%	29%	27%	25%	24%	22%	20%
16hr Lithium-ion	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	100%	99%	97%	81%	75%	70%	65%	60%	56%	52%	49%	46%	42%	39%	36%	34%	31%	29%	27%	25%	24%	22%	20%
4 hr Vanadium Flow Battery	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	100%	99%	97%	81%	75%	70%	65%	60%	56%	52%	49%	46%	42%	39%	36%	34%	31%	29%	27%	25%	24%	22%	20%
Liquid Air	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	100%	99%	97%	81%	75%	70%	65%	60%	56%	52%	49%	46%	42%	39%	36%	34%	31%	29%	27%	25%	24%	22%	20%
100hr Iron Oxide	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Pumped Hydro (8.5 hr 400 MW share)	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	100%	94%	88%	83%	78%	73%	69%	64%	60%	57%	53%	50%	47%	44%	41%	39%	36%	34%	32%	30%	28%	27%	25%
Pumped Hydro (16 hr 100 MW)	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	100%	94%	88%	83%	78%	73%	69%	64%	60%	57%	53%	50%	47%	44%	41%	39%	36%	34%	32%	30%	28%	27%	25%
Pumped Hydro (24 hr 100 MW)	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	100%	94%	88%	83%	78%	73%	69%	64%	60%	57%	53%	50%	47%	44%	41%	39%	36%	34%	32%	30%	28%	27%	25%
Pressure Recovery	10%	16%	16%	14%	12%	12%	12%	13%	12%	15%	8%	11%	100%	99%	98%	96%	95%	94%	93%	92%	91%	89%	88%	87%	86%	85%	84%	83%	82%	81%	80%	79%	78%	77%	76%
Redundant Recovery	20%	20%	20%	21%	21%	21%	18%	20%	22%	20%	22%	20%	100%	99%	98%	96%	95%	94%	93%	92%	91%	89%	88%	87%	86%	85%	84%	83%	82%	81%	80%	79%	78%	77%	76%
Wind Recovery	2%	1%	1%	10%	18%	18%	25%	23%	8%	6%	0%	1%	100%	99%	98%	97%	96%	95%	94%	93%	93%	92%	91%	90%	89%	88%	87%	86%	85%	84%	83%	82%	81%		
Low-income Community Solar	2%	1%	1%	10%	18%	18%	25%	23%	8%	6%	0%	1%	100%	99%	98%	97%	96%	95%	94%	93%	93%	92%	91%	90%	89%	88%	87%	86%	85%	84%	83%	82%	81%		

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	WASHINGTON	DATE PREPARED:	05/14/2024
CASE NO:	UE-240006 & UG-240007	WITNESS:	Marcus Garbarino
REQUESTER:	AWEC	RESPONDER:	Lori Hermanson
TYPE:	Data Request	DEPT:	Energy Resources
REQUEST NO.:	AWEC – 084	TELEPHONE:	(509) 495-4658
		EMAIL:	lori.hermanson@avistacorp.com

SUBJECT: Cost of Service

REQUEST:

Please refer to 240006-07-AVA-Exh-MJG-2-01-18-24.xlsx sheet Renewable Future Peak Credit:

- a. Please provide the source for each input on this sheet. If the value is a calculated value, please provide supporting workpapers.
- b. Please explain the difference between cells D5 and H14.

RESPONSE:

a) Please see cell notes in cells D4, D5, and H14 in AWEC-DR-084 Attachment A for the source of the data. The referenced source spreadsheet can be found here under the 2023 IRP here - <https://www.myavista.com/about-us/integrated-resource-planning>. Calculations are intact and included in this workpaper along with calculation formulas explained in column F. D6 and D7 are assumptions. In cell D14, the 0.322 is the capacity contribution. The 5.6% capacity contribution is the Jan QCC for generic wind resources in WA zone 1 (WRAP). Refer to AWEC-084-Attachment B for the calculation of the 60.9% load factor.

b) D5 is the cost per MWh charge for the 8-hr Lithium-Ion Battery Storage resource option (see Supply Side Resources Options 5.5.2023 posted on the IRP website referenced in above). H14 is the \$/MWh PPA Price for NW on-system wind (see Supply Side Resources Options 5.5.2023 posted on the IRP website).

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	WASHINGTON	DATE PREPARED:	05/14/2024
CASE NO:	UE-240006 & UG-240007	WITNESS:	Marcus Garbarino
REQUESTER:	AWEC	RESPONDER:	Marcus Garbarino
TYPE:	Data Request	DEPT:	Regulatory Affairs
REQUEST NO.:	AWEC – 085	TELEPHONE:	(509) 495-2567
		EMAIL:	marcus.garbarino@avistacorp.com

SUBJECT: Cost of Service

REQUEST:

Please refer to 240006-07-AVA-Exh-MJG-2-01-18-24.xlsx sheet Detail row 361:

- a. Please explain why account 565 is allocated using the E02 factor while other transmission accounts are allocated using the D02 factor.
- b. Is it Avista’s position that this allocation is consistent with WAC Section 480-85-060 Table 2? If yes, why?

RESPONSE:

- a. The balance in account 565 in 240006-07-AVA-Exh-MJG-2-01-18-24.xlsx sheet Detail row 361 are costs associated with Transmission of Electricity by Others. As described in Exh. MJG-1T on page 13, lines 12 through 17, “All transmission costs (except Transmission of Electricity by Others and revenue from Transmission of Electricity by Others which are part of net power costs included in the Energy Recovery Mechanism) are considered demand-related and allocated to customer rate classes by the average 12 system coincident peaks. The treatment is consistent with the methodology presented in Dockets UE-220053 et. al.”. Further, this method is consistent with the methodology presented in Dockets UE-200053 et. al.
- b. Yes. As stated in WAC Section 480-85-060 Table 2, “Net power costs are allocated using annual energy usage at the point of generation.”

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	WASHINGTON	DATE PREPARED:	05/29/2024
CASE NO:	UE-240006 & UG-240007	WITNESS:	Kaylene Schultz
REQUESTER:	AWEC	RESPONDER:	Marcus Garbarino
TYPE:	Data Request	DEPT:	Regulatory Affairs
REQUEST NO.:	AWEC – 090	TELEPHONE:	(509) 495-2567
		EMAIL:	marcus.garbarino@avistacorp.com

SUBJECT: Cost of Service

REQUEST:

Please provide net write-offs charged to FERC account 904 by schedule from 2019 to present.

RESPONSE:

The Company does not track or report net write-offs by rate schedule. However, they are tracked by service and class (residential or commercial). Below is a table showing net write-offs for 2019 through 2023 and 2024 year-to-date through April, charged to FERC account 144.2, “Accumulated Retail Write-Offs”. Please note that these amounts will not agree to the expense amount in FERC account 904, as the 904 account includes accruals for uncollectible accounts.

Net Write-Offs (in \$000's)

		<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u> <u>(YTD April)</u>
Washington Electric							
Residential	\$	1,844	\$ 1,168	\$ 1,023	\$ 1,797	\$ 4,433	\$ 1,190
Commercial		178	175	421	538	824	145
Total	\$	2,022	\$ 1,343	\$ 1,444	\$ 2,335	\$ 5,257	\$ 1,335
Washington Natural Gas							
Residential	\$	249	\$ 245	\$ 158	\$ 441	\$ 1,173	\$ 298
Commercial		43	37	74	111	186	70
Total	\$	292	\$ 282	\$ 232	\$ 552	\$ 1,359	\$ 368

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	WASHINGTON	DATE PREPARED:	05/30/2024
CASE NO:	UE-240006 & UG-240007	WITNESS:	Adrien McKenzie
REQUESTER:	AWEC	RESPONDER:	Adrien McKenzie
TYPE:	Data Request	DEPT:	Consultant
REQUEST NO.:	AWEC – 093	TELEPHONE:	(512) 923-2790
		EMAIL:	amm.fincap@outlook.com

SUBJECT: Cost of Capital

REQUEST:

Please refer to 240006-07-AVA-Exh-AMM-4-14-01-18-24 sheet “2023 11 Market DCF”:

- a. Please refer to cells F416 to F417. Please explain the basis for screening results using 0 to 20 percent limits. Please identify any supporting literature for this method.
- b. Please refer to columns G to I. For each column, please provide the source’s definition for the field. If these data are forecasts, please provide the time period the forecast is intended to represent.

RESPONSE:

- a. Mr. McKenzie adopted the same growth rate screening criteria specified by the Federal Energy Regulatory Commission (“FERC”) to develop a forward-looking market risk premium for purposes of applying the Capital Asset Pricing Model (“CAPM”). Please refer to the following FERC orders for an explanation of the rationale underlying FERC’s approach: *Ass’n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569, 169 FERC ¶ 61,129 (2019) at P 267-268, *vacated & remanded sub nom. MISO Transmission Owners v. FERC*, No. 16-1325 (D.C. Cir. 2022); *Ass’n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569-A, 171 FERC ¶ 61,154 (2020) at P 77, *vacated & remanded sub nom. MISO Transmission Owners v. FERC*, No. 16-1325 (D.C. Cir. 2022).
- b. The values reported in columns G, H and I of the referenced tab reflect the forecasted growth rate in earnings per share (“EPS”) for each of the listed companies, as reported by IBES, Zacks Investment Research (“Zacks”), and the Value Line Investment Survey (“Value Line”), respectively. Refinitiv, which compiles and publishes IBES growth rates, defines this value as follows:

Forward EPS Long Term Growth Next 3 to 5 Years

The long term growth rate represents an expected annual increase in operating earnings over the company's next full business cycle. These forecasts refer to a period of between three and five years, and are expressed as a percentage. Long term growth rate forecasts are received directly from contributing analysts; they are not calculated by Refinitiv. While different analysts apply different methodologies, the Long Term Growth Forecast generally represents an expected annual increase in operating earnings over the company’s next full business cycle. In general, these forecasts refer

to a period of between three to five years. Due to the variance in methodologies for Long Term Growth calculations, Refinitiv recommends (and uses as its default display) the median value for Long Term Growth Forecast as opposed to the mean value. The median value (defined as the middle value in a defined set of values) is less affected by outlier forecasts.

Zacks refers to this value as “Exp EPS Growth (3-5yr).” Value Line reports this value under the description “ANNUAL RATES of change (per sh), Earnings, Est’d ’20-’22 to ’26-’28.” EPS growth rate forecasts from IBES and Zacks are consensus growth rates that are compiled by these services based on surveys of participating securities analysts, and are generally understood to represent an amalgamation of 3-5 year forecasts. Value Line’s forecasted EPS growth rate represents a rate of change from a 3-year historical base period to a 3-year forecast horizon, corresponding to a time period of 6 years for the data reported in Column I (*i.e.*, 2021-2027).

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	WASHINGTON	DATE PREPARED:	05/30/2024
CASE NO:	UE-240006 & UG-240007	WITNESS:	Adrien McKenzie
REQUESTER:	AWEC	RESPONDER:	Adrien McKenzie
TYPE:	Data Request	DEPT:	Consultant
REQUEST NO.:	AWEC – 0094	TELEPHONE:	(512) 923-2790
		EMAIL:	amm.fincap@outlook.com

SUBJECT: Cost of Capital

REQUEST:

Please refer to 240006-07-AVA-Exh-AMM-4-14-01-18-24 sheet “Size Premium”:

- a.. Please provide the methodology used to calculate these values.
- b. Please provide a copy of the “Kroll, 2023 Supplementary CRSP Decile Size Study”.
- c. Please identify any third-party research or literature supporting the use of these premia when estimating utility cost of capital.
- d. Please identify any third-party research or literature supporting the use of these premia in conjunction with Value Line betas.
- e. Please identify any research or literature supporting the use of these premia in conjunction with an ECAPM model.

RESPONSE:

- a.. Please refer to Exh. AMM-3, pages 18-19, which provides an explanation of the methodology used to calculate the size adjustments reported by Kroll.
- b. Please refer to item “WP-6,” which was included in Mr. McKenzie’s workpapers, which were previously provided.
- c. Mr. McKenzie has not conducted a study to identify all financial research studies supporting the application of a size adjustment in applying the CAPM. The size adjustment methodology used by Mr. McKenzie is identical to that approved by the Federal Energy Regulatory Commission, which has concluded that “[t]his type of size adjustment is a generally accepted approach to CAPM analyses.” *Coakley v. Bangor Hydro-Elec. Co.*, Opinion No. 531-B, 150 FERC ¶ 61,165 P 117 (2015); *Ass’n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569, 169 FERC ¶ 61,129 (2019) at P 296-303, *vacated & remanded sub nom. MISO Transmission Owners v. FERC*, No. 16-1325 (D.C. Cir. 2022) (*finding that, “[W]e conclude that the size premium adjustments improve the accuracy of the CAPM results and cause it to better correspond to the costs of capital estimates employed by investors.”*).

Duff & Phelps confirmed the need for this adjustment, concluding that:

Examination of market evidence shows that within the context of the CAPM, beta does not fully explain the difference between small company returns and large company returns. In other words, the actual (historical) excess return smaller companies earn tends to be greater than the excess return predicted by the CAPM for these companies. This ‘premium over CAPM’ is commonly known as a ‘beta-adjusted size premium’ or simply “size premium.” Duff & Phelps, 2016 Valuation Handbook, Guide to Cost of Capital, John Wiley & Sons (2016) at 8-1.

Similarly, a publication available from the National Association of Certified Valuators and Analysts documented the continued relevance of the size adjustment in applying the CAPM:

[A] beta-adjusted size premium is also an indication of the relative market performance of small-cap versus large-cap stocks, but is typically used for a very specific purpose: as a “size” adjustment within the context of the capital asset pricing model (CAPM) when developing cost of equity capital estimates. A size adjustment is typically applied to the CAPM to make up for the fact that the betas of smaller companies do not fully explain their observed returns. Because the CAPM already includes a beta input in its textbook specification, the size premium is then “beta adjusted” to remove the portion of realized excess return that is attributable to beta, thereby isolating the size effect’s contribution to realized excess return and avoiding double counting the impact of each factor.

* * *

Another way of saying this is that within the context of the CAPM, the betas of small-cap companies do not fully account for (or explain) their actual returns. Because the amount of this difference (what actually happened versus what CAPM predicted) varies with “size” (in this case, as measured by market capitalization) we call it a “size premium”. Using a Non-Beta-Adjusted Size Premium in the Context of the CAPM Will Likely Overstate Risk and Understate Value (Jan. 30, 2019).

This article went on to conclude that “valuation professionals typically add a ‘size premium’ to the base CAPM equation. . .” Copies of the above-referenced articles are attached as AWEC-DR-094 Attachment A & B.

- d. Mr. McKenzie has not conducted a study to identify financial research studies that apply the CAPM using size adjustments quantified by Kroll (formerly Duff & Phelps and Ibbotson Associates) in conjunction with Value Line betas. As noted in Mr. McKenzie’s testimony at Exh. AMM-3, pages 7-8, Value Line betas are widely circulated and accepted. Mr. McKenzie is aware that FERC has concluded that it is appropriate to apply the CAPM methodology using Value Line betas and the size adjustments quantified by Kroll. *See, e.g., Ass’n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569, 169 FERC ¶ 61,129

(2019) at P 297, *vacated & remanded sub nom. MISO Transmission Owners v. FERC*, No. 16-1325 (D.C. Cir. 2022).

- e. Mr. McKenzie has not conducted a study to identify financial research studies that apply the CAPM using size adjustments quantified by Kroll (formerly Duff & Phelps and Ibbotson Associates) in conjunction with the ECAPM. Mr. McKenzie would note that the ECAPM is not fundamentally an adjustment to beta. Rather, the ECAPM recognizes the findings of empirical research demonstrating that the observed risk-return tradeoff is flatter than predicted by the traditional CAPM. Thus, even if the ECAPM is used, the return for smaller companies will be understated if beta fails to fully incorporate risks related to firm size.

Dividends Paid 2010-Present

Year	Amount
2010	55,682,184
2011	63,736,956
2012	68,552,375
2013	73,276,102
2014	78,313,788
2015	82,396,803
2016	87,154,239
2017	92,460,231
2018	98,046,075
2019	102,772,642
2020	110,253,196
2021	118,210,572
2022	128,649,304
2023	140,680,314
2024	37,160,326
Total	1,337,345,105