

BEFORE THE UTAH PUBLIC SERVICE COMMISSION

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IN THE MATTER OF THE  
APPLICATION OF CORIX UTAH CITY  
HEATING AND COOLING LLC TO  
ESTABLISH A THERMAL TARIFF WITH  
RATES AND TERMS OF SERVICE

Docket No. 26-2666-01

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**DIRECT TESTIMONY OF**

**JOHAN GRUESO-BARON FOR CORIX**

May 1, 2026

**EXHIBIT 7.0**

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**I. INTRODUCTION**

**Q. Please state your name, business address, and position with Corix.**

A. My name is Johan Grueso-Baron, Manager, Financial Planning and Analysis. My business address is 1160-1188 W Georgia St #1160, Vancouver, BC V6E 4A2.

**Q. Please describe the responsibilities of your current position.**

A. I am responsible for leading the financial planning, forecasting, and performance analysis for Corix’s regulated Utilities – West. My role also includes regulatory support, which involves preparing financial information used in regulatory filings, organizing and responding to data and discovery requests, and providing financial and analytical support in rate cases. In connection with this General Rate Case (GRC) Application for the Utah City District Energy Utility (UCDEU), I am responsible for the development and custodianship of the UCDEU GRC Financial Model (Highly Confidential Corix Exhibit 7.1) and the UCDEU ECRA Financial Model (Highly Confidential Corix Exhibit 7.2), which are the primary quantitative tools supporting the revenue requirement, rate base, and rate design calculations presented in this proceeding.

**Q. What are your qualifications to testify in this proceeding?**

A. I am a financial engineer with a Master of Science in Quantitative Finance from the Christian-Albrecht University of Kiel, Germany. My academic training provided a rigorous foundation in financial modeling, quantitative methods, valuation, and financial risk analysis, which I have applied directly to the construction and review of complex financial models throughout my professional career. In addition, I have over 15 years of progressive experience in financial planning and analysis, including approximately 3.5 years supporting rate-regulated utilities. In my current role at Corix as Manager,

24 Financial Planning & Analysis, I have been responsible for the development of the  
25 financial models supporting the revenue requirement, rate base, and rate design  
26 calculations presented in multiple proceedings.

27 **Q. Have you testified in previous regulatory proceedings?**

28 A. No. This is my first regulatory testimony filing.

29 **II. PURPOSE OF TESTIMONY**

30 **Q. What is the purpose of your testimony?**

31 A. The purpose of this testimony is to present and explain the financial models underlying  
32 the revenue requirement and rate design for the UCDEU in connection with this GRC  
33 Application filed with the Utah Public Service Commission ("PSC") in this docket.  
34 Specifically, this testimony describes: (1) the structure, architecture, and modeling  
35 conventions of the UCDEU GRC Financial Model (Highly Confidential Corix Exhibit  
36 7.1) and the UCDEU ECRA Financial Model (Highly Confidential Corix Exhibit 7.2);  
37 (2) the customer forecast, peak load, and energy demand inputs that drive both models;  
38 (3) the derivation of each component of the delivery revenue requirement, including  
39 capital expenditures, Plant in Service, depreciation, rate base, operating expenses, cost of  
40 capital, and taxes; and (4) the resulting test year delivery revenue requirement, proposed  
41 Capacity Charge, and projected Revenue Deficiency Deferral Account ("RDDA")  
42 recovery profile.

43 **Q. Please summarize your testimony.**

44 A. This testimony is organized into twelve sections. Sections I through III provide  
45 introductory and contextual material. Sections IV through XI address the substantive  
46 financial model components in the order in which they flow through the revenue

47 requirement build-up. Section XII provides a conclusion. The sections and their contents  
48 are summarized below:

49 • **Section I** — Introduction: Identifies me and describes my current responsibilities and  
50 qualifications.

51 • **Section II** — Purpose and Summary of Testimony: Describes the purpose of my  
52 testimony and its role in the GRC Application, provides this section-by-section  
53 roadmap, and summarizes the key findings and recommendations.

54 • **Section III** — Overview of the UCDEU Financial Models: Describes the purpose,  
55 architecture, and modeling conventions of the GRC Financial Model (Highly  
56 Confidential Corix Exhibit 7.1) and the ECRA Financial Model (Highly Confidential  
57 Corix Exhibit 7.2), including the input tabs, forecast engine tabs, and output schedule  
58 tabs; explains the linkage between the two models and the testimony of other  
59 witnesses; and presents the exhibit and workpaper index.

60 • **Section IV** — Customer Forecast, Peak Load, and Energy Demand: Explains the  
61 Utah City development project, the customer (Flagborough), the buildout schedule,  
62 the undiversified and diversified peak load methodology, the energy use intensity  
63 assumptions, and the resulting annual energy demand forecast for the test year and the  
64 indicative forecast years.

65 • **Section V** — Energy Supply Costs and Energy Supply Revenue Requirement:  
66 Describes the energy supply cost components modeled in the ECRA Financial Model,  
67 the customer thermal consumption forecast, the resulting test year energy supply  
68 revenue requirement, and the proposed Energy Charge. It also describes the ECRA  
69 mechanism and its relationship with the delivery revenue requirement.

- 70           • **Section VI** — Capital Expenditures, Plant in Service, CIAC, Depreciation and  
71           Amortization: Describes the capital expenditure program by asset category, the in-  
72           service timing methodology, the treatment of Contributions in Aid of Construction  
73           ("CIAC"), the regulatory book depreciation methodology and rates, and the AFUDC  
74           calculation methodology.
- 75           • **Section VII** — Rate Base and Rate Base Methodology: Explains the components of  
76           rate base, the mid-year averaging convention applied for years 2027 and beyond, the  
77           startup year weighted average methodology applied for 2026, and the treatment of the  
78           RDDA as a rate base item earning a carrying charge at the authorized WACC.
- 79           • **Section VIII** — Operating Expenses and Working Capital: Describes the operating  
80           and maintenance expense categories included in the delivery revenue requirement as  
81           well as the working capital methodology.
- 82           • **Section IX** — Cost of Capital and Capital-Related Costs: Explains the capital  
83           structure, authorized ROE, cost of debt, AFUDC methodology, and the calculation of  
84           the authorized return on rate base, consistent with the cost of capital inputs  
85           established in the testimonies of Maxwell Wang (Corix Exhibit 4.0) and Josh  
86           Figueroa (Corix Exhibit 5.0).
- 87           • **Section X** — Taxes: Describes all taxes reflected in the GRC Financial Model,  
88           including property tax, franchise fees, energy-related sales taxes, and income taxes.  
89           The income tax discussion covers the taxable income bridge, current federal and state  
90           income tax payable, the HCITC, temporary differences giving rise to deferred tax  
91           assets and liabilities, the normalized tax allowance formula, the equity AFUDC

92 permanent difference, and Accumulated Deferred Income Taxes ("ADIT") in rate  
93 base.

94 • **Section XI** — Delivery Revenue Requirement: Presents the total delivery revenue  
95 requirement for the test year, explains the separation between the delivery and energy  
96 supply revenue requirements, describes the ECRA and RDDA mechanisms, and  
97 summarizes the projected RDDA recovery profile through 2041.

98 • **Section XII** — Conclusion: Summarizes the testimony and confirms that the GRC  
99 Financial Model accurately reflects the revenue requirement and supports the  
100 approvals sought in the GRC Application.

101 **Q. Please summarize your recommendations.**

102 A. As set forth in more detail below, I recommend that the PSC approve UCDEU's  
103 proposed rates and related revenue requirement, including the rate stabilization approach,  
104 and approve the accounting and tax treatments reflected in the financial modeling that  
105 supports this Application.

106 **III. OVERVIEW OF THE UCDEU FINANCIAL MODELS**

107 **Q. What financial models support the UCDEU GRC Application?**

108 A. The UCDEU GRC Application is supported by three financial models, each serving a  
109 distinct function within the overall revenue requirement and rate design:

110 • **The GRC Financial Model (Highly Confidential Corix Exhibit 7.1):** an Excel-  
111 based financial model that calculates the delivery revenue requirement, rate base, cost  
112 of capital return, operating expenses, depreciation, taxes, and the Revenue Deficiency  
113 Deferral Account ("RDDA") position across the forecast period. The GRC Financial  
114 Model is the primary financial model supporting this testimony and the delivery

115 revenue requirement presented in GRC Application, Attachment 1. The GRC  
116 Financial Model produces the financial schedules included in Appendix A of  
117 Attachment 1 of this GRC Application.

118 • **The ECRA Financial Model (Highly Confidential Corix Exhibit 7.2):** a separate  
119 Excel-based model that calculates the energy supply revenue requirement, including  
120 the costs of electricity, natural gas, water and wastewater, and chemicals required to  
121 produce and deliver thermal energy to customers. The ECRA Financial Model  
122 establishes the proposed Energy Charge for the test period and supports the Energy  
123 Cost Reconciliation Account ("ECRA") mechanism.

124 • **The ECRA Financial Model Public (Corix Exhibit 7.3):** Public version of the  
125 Exhibit 7.2.

126 My testimony is organized around the outputs of the GRC Financial Model for  
127 Sections IV through XI, with references to the ECRA Financial Model in Sections IV and  
128 V, which address the customer forecast, energy demand, and energy supply costs.

129 **Q. What is the overall purpose of the GRC Financial Model?**

130 A. The GRC Financial Model is a financial model supporting the UCDEU revenue  
131 requirement and rate application. It combines historical actuals, key input assumptions,  
132 and forecasts to produce regulatory schedules, supporting calculations, and charts. The  
133 GRC Financial Model translates engineering, operational, and financial inputs into a fully  
134 integrated regulatory cost-of-service model that produces the delivery revenue  
135 requirement, rate base, and RDDA position for each forecast year from 2026 through  
136 2044.

137

138 *A. Model Architecture: Inputs, Forecast Engines, and Output Schedules*

139 **Q. How is the GRC Financial Model organized?**

140 A. The GRC Financial Model (Highly Confidential Corix Exhibit 7.1) is organized into three  
 141 functional layers — **input tabs, forecast engine tabs, and output schedule tabs** —  
 142 which work together in a structured, sequential flow. Blue font cells are hard-coded  
 143 inputs (historical data or user-entered assumptions). Black font cells are calculated cells  
 144 or formulas. This formatting convention allows any reviewer to immediately distinguish  
 145 modeled assumptions from calculated results at any point in the workbook.

146 **Q. What are the input tabs and what do they contain?**

147 A. The GRC Financial Model contains six input tabs, each serving a specific function:

148 **GRUESO-BARON TABLE 1**

<b>Input Sheet</b>	<b>Purpose</b>	<b>Key Contents</b>
<b>General Inputs</b>	Centralized model parameters and global assumptions used across the workbook.	Regulatory dates, financing structure, allowed ROE, conversion factors, and other global inputs referenced broadly by forecast engines and schedules.
<b>O&amp;M Inputs</b>	Driver inputs for operating and maintenance costs.	FTEs, cost categories, escalation assumptions, and mapping to the OPEX forecast.
<b>Capex Inputs</b>	Driver inputs for capital expenditure plans and construction assumptions.	Equipment plan, construction flags, phasing, escalation drivers, and mapping to the Capex forecast.
<b>Customers Inputs</b>	Customer archetype assumptions and demand/consumption intensities.	Building typologies, peak demand, annual consumption, capacity and diversification factors.
<b>Interest_rate</b>	Interest rate assumption curve	Historical and forward interest rate series with derived date components feeding

<b>Input Sheet</b>	<b>Purpose</b>	<b>Key Contents</b>
	used for debt cost and financing calculations.	interest expense and AFUDC interest components.
<b>Actuals</b>	Repository of historical actual operational and financial data used for calibration and starting points.1	Actual period data (Construction Work in progress and accrued AFUDC), mappings, and accumulated actual calculations for comparisons.

149 **Q. What are the forecast engine tabs and how do they function?**

150 A. The forecast engine tabs translate input assumptions into annual and period-level  
151 projections across the full forecast horizon. The GRC Financial Model contains the  
152 following forecast engine tabs:

153

**GRUESO-BARON TABLE 2**

<b>Forecast Sheet</b>	<b>Purpose</b>
<b>Drivers and F&amp;U Fcst</b>	Monthly forecast engine for customer connections, customer demand, peak demand, connected floor area, installed capacity, Energy consumed and energy costs. Feeds the OPEX, Capex, and downstream regulatory schedules.
<b>OPEX Fcst</b>	Monthly forecast engine for Operating expense forecast. Feeds Schedule 2 (Revenue Requirement), Schedules 12 and 13 (O&M and Labor), and the DES Fcst.
<b>Capex Fcst</b>	Monthly capital expenditure forecast engine and roll-forward by asset category and period, including capex timing, escalation, CWIP, AFUDC components, and capitalization rollups. Feeds plant continuity and AFUDC schedules and ultimately rate base.
<b>HCITC Fcst</b>	Forecast of Utah High-Cost Infrastructure Tax Credits and related limitations, including credit eligibility, timing, maximum credit computations, and rollups by phase. Feeds the income tax support schedules.

<b>Forecast Sheet</b>	<b>Purpose</b>
<b>DES Fcst</b>	Forecast engine that aggregates the input tabs and forecast engine tabs to calculate the Revenue Requirements, mid-year rate base, and the regulatory financial statements. The DES forecast outputs (Actuals and Forecast years) used for schedules.
<b>DES Fcst 2026-2027</b>	Detailed period-level DES forecast used for regulatory test-year support.

154 **Q. What are the output schedule tabs and what regulatory information do they**  
155 **present?**

156 A. The output schedule tabs are view-only tabs that pull results from the forecast engine tabs  
157 and input tabs and present them in regulatory-ready formats. The GRC Financial Model  
158 produces 22 output schedules, each filed as part of GRC Application, Attachment 1,  
159 Appendix A.

160 *B. Linkage to the ECRA Model and Other Witness Testimonies*

161 **Q. How does the GRC Financial Model relate to the ECRA Financial Model?**

162 A. The GRC Financial Model (Highly Confidential Corix Exhibit 7.1) and the ECRA  
163 Financial Model (Highly Confidential Corix Exhibit 7.2) are complementary but  
164 operationally distinct models. Their relationship is as follows:

- 165 • The **ECRA Financial Model** (Highly Confidential Exhibit 7.2) calculates the energy  
166 supply revenue requirement for the test period — the variable costs of purchased energy  
167 inputs — and produces the proposed Energy Charge. It is the primary model for Section  
168 V of this testimony.
- 169 • The **GRC Financial Model** (Highly Confidential Corix Exhibit 7.1) calculates the  
170 delivery revenue requirement — the fixed infrastructure, capital recovery, and operating

171 costs — and produces the proposed Capacity Charge, the RDDA balance, and all other  
172 components of the regulated cost of service. It is the primary model for Sections VI  
173 through XI of this testimony.

174 The two models share common demand and customer growth inputs — including  
175 connected floor area, diversified peak loads, and energy demand volumes — which  
176 originate from the customer and engineering analysis described in Section IV of this  
177 testimony and the Ramboll technical memo (Corix Exhibit 6.2). For the indicative years  
178 beyond the test period, the GRC Financial Model estimates the indicative energy supply  
179 revenue requirement and the corresponding indicative Energy Charge for each forecast  
180 year. These indicative values are provided for long-term planning purposes and to  
181 illustrate the projected trajectory of energy supply costs as the Utah City development  
182 builds out. However, the Energy Charge will be amended on an annual basis when the  
183 utility files a pass-through application with the forecast for the upcoming energy supply  
184 costs and targets to clear the ECRA balance in the filing's 12-month energy supply test  
185 period.

186 **Q. How does this testimony relate to the testimonies of other UCDEU witnesses?**

187 A. My testimony is limited to the financial model inputs, structure, and outputs. The  
188 following table identifies the topics addressed by other witnesses in this proceeding and  
189 the corresponding cross-references to this testimony:

190

**GRUESO-BARON TABLE 3**

<b>Exhibit</b>	<b>Witness</b>	<b>Topic</b>	<b>Relationship with This Testimony</b>
<b>2.0</b>	Errol South	Corporate structure, organizational structure, and cost allocation	Allocation inputs used in the O&M cost build described in Section VIII
<b>3.0</b>	Douglas Chong	Regulatory framework, RDDA mechanism, ECRA, and rate design	Regulatory policy basis for RDDA and ECRA inputs described in Sections VII and XI
<b>4.0</b>	Maxwell Wang	Cost of capital — CFO perspective	Capital structure, ROE, and cost of debt inputs described in Section IX
<b>5.0</b>	Josh Figueroa	Cost of capital — independent expert	Expert opinion on reasonableness of capital structure and ROE inputs described in Section IX
<b>6.0</b>	Derek Nelson	Engineering design, capital expenditures, depreciation, and O&M	Operational and Engineering basis for O&M, capital expenditure and depreciation inputs described in Sections VI and VIII
<b>8.0</b>	Hang Hockley	District Energy Services Agreement (DESA) and customer relationship	Customer and contractual basis for revenue and demand assumptions described in Section IV

191                   Where my testimony relies on inputs established by another witness, I cross-  
192                   reference that witness's exhibit and confirm that the input is correctly implemented in the  
193                   GRC Financial Model. I do not independently validate the engineering, legal, or policy  
194                   conclusions of other witnesses; my scope is limited to the financial model.

195

196 *C. Key Assumptions and Modeling Conventions*

197 **Q. What is the test period reflected in the GRC Financial Model?**

198 A. The test period for this GRC Application is **August 1, 2026, through July 31, 2027**. The  
199 GRC Financial Model reflects this test period in the DES Fcst 2026-2027 tab, which  
200 presents period-level calculations for the two sub-periods that together comprise the test  
201 year: (i) August 1 – December 31, 2026 (the partial first year of operations) and (ii)  
202 January 1 – July 31, 2027. Annual forecast years in the DES Fcst tab run on a calendar-  
203 year basis from 2026 through 2044, providing the indicative forecast used for long-term  
204 planning and RDDA recovery analysis.

205 **Q. What rate base convention is applied in the GRC Financial Model?**

206 A. The GRC Financial Model applies a **mid-year rate base convention** for all forecast  
207 years from 2027 onward. Under the mid-year convention, rate base for each year is  
208 calculated as the simple average of the opening and closing Plant in Service, accumulated  
209 depreciation, CWIP, working capital, ADIT, and RDDA balances for that year, reflecting  
210 the average capital investment held in service throughout the year. For the startup year  
211 (2026), the model applies a **weighted average Plant in Service calculation** that reflects  
212 the actual timing of when Phase 1 assets are placed in service during the year, assigning  
213 each asset a weight proportional to the fraction of the year during which it is actually in  
214 service. The rationale for both methodologies is described in detail in Section VII of this  
215 testimony.

216 **Q. What other key modeling conventions govern the GRC Financial Model?**

217 A. The following additional conventions are applied consistently throughout the GRC  
218 Financial Model:



241

**GRUESO-BARON TABLE 4**

<b>Corix Exhibit No.</b>	<b>Description</b>	<b>GRC Application Reference</b>
<b>7.0</b>	Direct Testimony of Johan Grueso-Baron	GRC Application, Attachment 1, Appendix D
<b>7.1</b>	UCDEU GRC Financial Model — Excel (Highly Confidential)	GRC Application, Attachment 1, Section 24
<b>7.2</b>	UCDEU ECRA Financial Model — Excel (Highly Confidential)	GRC Application, Attachment 1, Section 8
<b>7.3</b>	UCDEU ECRA Financial Model Public — Excel	GRC Application, Attachment 1, Section 8
<b>7.4</b>	Detailed Build-out Schedule — PDF (Highly Confidential)	GRC Application, Attachment 1, Section 7

242 Corix Exhibits 7.1, 7.2, and 7.4 referenced above are designated Highly  
243 Confidential. The Schedules contained in each model are filed publicly as part of GRC  
244 Application, Attachment 1, Appendix A, with any confidential data appropriately  
245 redacted.

246 **Q. Does your testimony incorporate any Sections of Attachment 1 to the Application?**

247 A. Yes, my testimony incorporates Sections 7, 8, 15-17, 10-22, and 24 of the document  
248 labeled Attachment 1: Supplement to the Application. I wrote and am responsible for the  
249 materials in these Sections.

250 **IV. CUSTOMER FORECAST, PEAK LOAD, AND ENERGY DEMAND**

251 **Q. What is the purpose of this section of your testimony?**

252 A. This section explains the customer build-out, peak load, and energy demand forecast for  
253 the test period and the indicative years of the GRC Application, as set forth in Section 6  
254 of Attachment 1 to the Application. Specifically, I describe the development project, the  
255 customer, the buildout schedule, the diversified peak load assumptions, and the annual  
256 energy demand forecast as reflected in the UCDEU GRC Financial Model (Highly  
257 Confidential Corix Exhibit 7.1) and the UCDEU ECRA Financial Model (Highly  
258 Confidential Corix Exhibit 7.2). The supporting engineering basis for the load and  
259 demand assumptions is documented in the Ramboll workpaper filed as Corix Exhibit 6.2.

260 *A. The Development Project and the Customer*

261 **Q. Please describe the Utah City development project.**

262 A. Corix and Utah developer Flagborough have partnered to develop an innovative low-  
263 carbon district energy system for Utah City, a groundbreaking urban development  
264 positioned to become a leading destination for living, working, entertainment, and  
265 exploration. The UCDEU will ultimately serve approximately 20 million square feet of  
266 connected floor space at full build-out, with a heating capacity of 64 MW and a cooling  
267 capacity of 90 MW.

268 **Q. Who is the customer of the UCDEU?**

269 A. The utility's single customer is Flagborough, the developer and owner of the Utah City  
270 development project. Flagborough and Corix are parties to a District Energy Services  
271 Agreement ("DESA"), which governs the thermal energy supply and delivery  
272 relationship for the development. Flagborough receives thermal energy through the

273 UCDEU's distribution system and redistributes it to end-users — building tenants and  
274 owners — within the development.

275 ***B. Buildout Schedule***

276 **Q. Please describe the buildout schedule that forms the basis for the demand and**  
277 **revenue requirement forecasts in the financial models.**

278 A. The detailed buildout schedule is set out in Highly Confidential Corix Exhibit 7.4. The  
279 schedule identifies each block within the Utah City development area, its development  
280 phase, undiversified peak load (heating and cooling, in MW), floor area by building type  
281 — including residential, large office, retail, hotel/hospitality, grocery, and pool use —  
282 peak demand intensity (W/m<sup>2</sup>), and the projected connection year.

283 **Q. What building types are included in the forecast, and what floor area is projected**  
284 **for the test period?**

285 A. The building types modeled in the buildout schedule include Residential, Large Office,  
286 Retail, Hotel/Hospitality, Grocery, and Pool. Total connected floor area grows from  
287 approximately 425,000 square feet in the first partial year of operations (2026) to  
288 approximately 737,366 square feet by the end of the test period, which is predominantly  
289 residential floor area. Beyond the test period, the buildout continues through 2044 and  
290 into subsequent forecast years as additional blocks are connected, ultimately reaching  
291 approximately 17.9 million square feet of total connected floor area.

292 **Q. When does service to the first customer connections begin?**

293 A. Phase 1 of the UCDEU is scheduled to be commissioned in 2026, with the first customer  
294 connections expected during that initial period. The test period for this GRC Application

295 spans August 1, 2026 (date of the expected first customer building connection) through to  
296 July 31, 2027.

297 ***C. Undiversified and Diversified Peak Load***

298 **Q. How are peak loads determined for use in the financial model?**

299 A. Peak loads are determined on a block-by-block basis using per-unit peak demand  
300 intensities (in W/m<sup>2</sup>) applied to the projected gross floor area for each building type  
301 within the service area. The peak demand intensities by building typology are set out in  
302 GRUESO-BARON TABLE 5 below, as documented in the Ramboll workpaper filed as  
303 Corix Exhibit 6.2. These undiversified block-level peak demands are then reduced by a  
304 demand diversification factor to reflect the statistical non-coincidence of individual  
305 building peaks at the district scale. The resulting diversified peak loads are used to size  
306 central plant infrastructure and to establish the capacity charge basis in the GRC  
307 Financial Model.

308 **GRUESO-BARON TABLE 5**

<b>Building Typology</b>	<b>Peak Heating (W/m<sup>2</sup>)</b>	<b>Peak Cooling (W/m<sup>2</sup>)</b>
Residential	50	70
Large Office	50	70
Retail	50	70
Grocery	50	70
Pool	131.2	—
Hotel / Hospitality	50	70

309 *Note: The Pool typology does not have an associated peak cooling demand intensity, as*  
310 *pool facilities do not require district cooling service. The "—" denotes not applicable.*

311 **Q. What diversification factor is applied, and what is its technical basis?**

312 A. A demand diversification factor of 70% has been applied uniformly to peak heating and  
313 cooling loads for each block in the service area. This factor reflects the statistical non-  
314 coincidence of individual building peak demands within a district energy cluster and is  
315 used to establish the central plant sizing basis. The 70% factor is consistent with the  
316 following published guidance:

- 317 • **ASHRAE District Cooling Guide (2013), Chapter 2, Section 2.3.2:** demand diversity  
318 factors for mixed-use district energy clusters range from 0.65 to 0.80; 0.70 is  
319 recommended for preliminary design of mixed residential-commercial developments in  
320 the 200,000 to 500,000 ft<sup>2</sup> connected load range.
- 321 • **IDEA District Cooling Best Practice Guide (2008), Chapter 4, Section**  
322 **4.2:** coincidence factors for mixed-use urban blocks range from 0.60 to 0.80; 0.70 is  
323 recommended for pre-design estimates where metered data are unavailable.
- 324 • **Ramboll Internal Benchmark Database:** observed metered coincidence factors from  
325 five comparable North American district energy systems range from 0.65 to 0.74 at the  
326 block scale, consistent with the 0.70 design assumption.

327 **Q. What are the resulting diversified peak demands for the test year?**

328 A. As set forth in Schedule 16 of GRC Application, Attachment 1, Appendix A, the  
329 diversified peak demands for the test year are 2.9 MW for heating and 1.9 MW for  
330 cooling, reflecting the phased buildout of connected floor area during the test period.

331 *D. Energy Demand Forecast*

332 **Q. How is annual energy consumption estimated in the financial model?**

333 A. Annual energy demand is calculated using Energy Use Intensities (EUI) by building  
334 typology, as established by Ramboll and documented in Corix Exhibit 6.2. The EUI  
335 values by building typology are set out in GRUESO-BARON TABLE 6 below.

336 **GRUESO-BARON TABLE 6**

<b>Building Typology</b>	<b>Heating EUI (kWh/m<sup>2</sup>/year)</b>	<b>Cooling EUI (kWh/m<sup>2</sup>/year)</b>
Residential	111.44	73.83
Large Office	111.44	73.83
Retail	111.44	73.83
Grocery	111.44	73.83
Pool	598.25	—
Hotel / Hospitality	111.44	73.83

337 *Note: The Pool typology does not have an associated cooling EUI, as pool facilities do*  
338 *not require district cooling service. The "—" denotes not applicable.*

339 For the test year, the annual energy demand derived from the EUI approach is  
340 further refined in the ECRA Financial Model (Highly Confidential Corix Exhibit 7.2) by  
341 introducing two additional adjustments:

- 342 1. **Residential occupancy ramp-up:** recognizing that residential buildings do not reach full  
343 occupancy on the first day of service, the model applies a gradual increase in energy  
344 usage during the initial year of operation to reflect the progressive take-up of units within  
345 each connected building.

346 2. **Hourly load refinement:** hourly loads are estimated using a piecewise linear (change-  
347 point) regression model to relate outdoor air temperature to hourly heating and cooling  
348 demand, consistent with ASHRAE Guideline 14-2023, as documented in Exhibit 6.2.  
349 Hourly modeling is utilized to estimate total energy consumption across the year based  
350 on typical weather conditions.

351 For the long-term and indicative years beyond the test period, the annual energy  
352 demand calculation does not apply the residential occupancy ramp-up adjustment or the  
353 hourly load regression, in order to keep the model parsimonious while capturing the  
354 indicative energy demand required for longer-term planning purposes.

355 **Q. What is the total annual energy served projected for the test year?**

356 A. As set forth in Schedule 16 of GRC Application, Attachment 1, Appendix A, the total  
357 projected annual energy served for the test year is **6,442.76 MWh**, consisting of **4,170.44**  
358 **MWh** for heating and **2,272.32 MWh** for cooling. These figures reflect the connected  
359 floor area during the test period and the methodology described above.

360 **Q. What is the expected split between heating and cooling demand over the course of**  
361 **the year?**

362 A. The Utah City site is located in Climate Zone 5B (Vineyard, Utah), which is a cold, dry  
363 climate. As a result, heating demand is expected to dominate annual energy consumption,  
364 with cooling demand concentrated in the summer months. The model captures this  
365 seasonal pattern through monthly heating and cooling load distributions, reflecting the  
366 distinct seasonality of the Wasatch Front climate. This seasonal asymmetry is reflected in  
367 the test-year diversified peak demands of 2.9 MW for heating compared to 1.9 MW for

368 cooling, and in the annual energy split of 4,170.44 MWh for heating (approximately 65%  
369 of total demand) versus 2,272.32 MWh for cooling (approximately 35% of total demand).

370 *E. Link to Revenue Requirement*

371 **Q. How does the energy demand forecast translate into the revenue requirement?**

372 A. The annual energy demand forecast serves two distinct functions in the financial models.  
373 First, it drives the ECRA Financial Model (Highly Confidential Corix Exhibit 7.2) by  
374 establishing the thermal consumption volumes used to calculate energy supply costs and  
375 the Energy Charge revenue requirement, as addressed in Section V of this testimony.  
376 Second, it provides the diversified peak capacity basis used in the GRC Financial Model  
377 (Highly Confidential Corix Exhibit 7.1) to size rate base assets and to calculate the  
378 Capacity Charge component of the Delivery Revenue Requirement, as addressed in  
379 Section XI of this testimony.

380 **V. ENERGY SUPPLY COSTS AND ENERGY SUPPLY REVENUE**  
381 **REQUIREMENT**

382 **Q. What is the purpose of this section of your testimony?**

383 A. This section addresses the energy supply costs for the test period and the indicative years,  
384 the customer thermal consumption forecast, the thermal energy supply cost components  
385 — including electricity, natural gas, water and wastewater, and chemicals, safety, and  
386 testing — as well as the total energy supply costs summary, the test period unit costs, and  
387 the proposed Energy Charges for the test period, as set forth in Sections 7 and 8 of  
388 Attachment 1 to the Application. My testimony in this section is limited to the financial  
389 modeling of these cost inputs as reflected in the UCDEU ECRA Financial Model (Highly  
390 Confidential Corix Exhibit 7.2). The regulatory framework governing energy supply cost

391 recovery and the Energy Cost Reconciliation Account ("ECRA") is addressed by Douglas  
392 Chong in Exhibit 3.0.

393 **Q. How do energy supply costs relate to the overall revenue requirement structure of**  
394 **the UCDEU?**

395 A. The proposed two-part rate structure for UCDEU directly relates to the unbundled two  
396 parts of the thermal revenue requirements: (a) the delivery revenue requirement and (b)  
397 the energy supply revenue requirement. The capacity (fixed) revenues arising from the  
398 Capacity Charge are directly and only related to the delivery revenue requirement. The  
399 energy (variable) revenues arising from the Energy Charge are directly and only related  
400 to the energy supply revenue requirement. The ECRA Financial Model (Highly  
401 Confidential Corix Exhibit 7.2) is the tool used to calculate the energy supply revenue  
402 requirement, which in turn establishes the proposed Energy Charge for the test period.

403 For years beyond the test period, the GRC Financial Model (Highly Confidential  
404 Corix Exhibit 7.1) estimates the indicative energy supply revenue requirement and the  
405 corresponding indicative Energy Charge for each forecast year. These indicative values  
406 are provided for long-term planning purposes and to illustrate the projected trajectory of  
407 energy supply costs as the Utah City development builds out. However, the Energy  
408 Charge will be amended on an annual basis when the utility files a pass-through  
409 application with the forecast for the upcoming energy supply costs and also targets to  
410 clear the ECRA balance in the filing's 12-month energy supply test period. The ECRA  
411 balance may be in a debit position (costs to be recovered from ratepayers) or a credit  
412 position (funds to be returned to ratepayers). Accordingly, the indicative values shown in  
413 the GRC Financial Model for years beyond the test period will be trued up annually

414 through the ECRA pass-through filing process and do not represent fixed committed  
415 charges.

416 **Q. What is the nature of energy supply costs?**

417 A. The energy supply costs are variable costs directly related to the production of thermal  
418 energy service for both heating and cooling. If customers have higher thermal  
419 consumption the energy supply costs increase. If customers have lower thermal  
420 consumption the energy supply costs decrease. They are directly correlated with each  
421 other. Because of this direct link between actual consumption and actual energy supply  
422 costs, these costs are modeled and recovered separately from the delivery revenue  
423 requirement through the ECRA mechanism.

424 *A. Customer Thermal Consumption Forecast*

425 **Q. How is the customer thermal consumption forecast used in the ECRA Financial**  
426 **Model?**

427 A. The customer thermal consumption forecast, as described in Section IV of this  
428 testimony, provides the foundational input to the ECRA Financial Model (Highly  
429 Confidential Corix Exhibit 7.2). The annual energy demand forecast — expressed in  
430 MWh of thermal energy delivered for heating and cooling — drives the calculation of  
431 each energy supply cost category. Section 7.2 of the GRC Application addresses the  
432 customer thermal consumption forecast as the basis for calculating thermal energy supply  
433 costs for the test period and the indicative years. As set forth in Schedule 16 of GRC  
434 Application, Attachment 1, Appendix A, the total projected thermal energy demand for  
435 the test year is 6,442.76 MWh, comprising 4,170.44 MWh for heating and 2,272.32  
436 MWh for cooling.

437 **Q. How are electricity, natural gas, and water consumption estimated in the energy**  
438 **supply cost models?**

439 A. Electricity, natural gas, and water consumption are calculated by working backward from  
440 the customer energy demand forecasts described in Section IV of this testimony. The  
441 coefficients of performance, equipment efficiencies, parasitic electricity consumption,  
442 distribution losses, and water consumption factors used in these calculations are based on  
443 independent engineering analysis provided by Ramboll (Corix Exhibit 6.2).

444 Cooling service is provided using water-cooled chillers with an effective  
445 coefficient of performance of 5.86, meaning that one unit of electricity produces 5.86  
446 units of cooling output. In addition to chiller electricity, the model includes electricity  
447 required for pumping, estimated at 7 percent of cooling energy, and distribution losses  
448 estimated at 3.5 percent. Cooling service also requires water consumption, which is  
449 modeled at 0.6 gallons per kilowatt-hour of cooling energy produced.

450 Heating service is provided using condensing natural gas boilers with an  
451 efficiency of 0.92, meaning that one unit of natural gas produces 0.92 units of heating  
452 output. Heating service also requires electricity for pumping, estimated at 7 percent of  
453 heating energy, includes distribution losses estimated at 7 percent of heating energy  
454 delivered, and requires water consumption modeled at 0.1 gallons per kilowatt-hour of  
455 heating energy delivered.

456 These assumptions allow the model to translate customer heating and cooling  
457 demand into the corresponding electricity, natural gas, and water consumption required to  
458 operate the district energy system.

459

460 ***B. Thermal Energy Supply Cost Components***

461 **Q. What are the thermal energy supply cost components modeled in the ECRA**  
462 **Financial Model?**

463 A. The thermal energy supply cost components modeled in the ECRA Financial Model are:  
464 (1) Electricity; (2) Natural Gas; (3) Water and Wastewater; and (4) Chemicals, Safety,  
465 and Testing. Each component is described in the subsections below. The total energy  
466 supply cost for the test period is set out in Schedule 14 of GRC Application, Attachment  
467 1, Appendix A.

468 **Q. Please describe the electricity cost component modeled in the ECRA Financial**  
469 **Model.**

470 A. Electricity is an energy supply cost for both the heating and cooling services provided by  
471 the UCDEU. For cooling, the primary electricity cost arises from the operation of water-  
472 cooled chillers, with additional electricity required for system pumping, estimated at 7  
473 percent of cooling energy. For heating, electricity is required for system pumping,  
474 estimated at 7 percent of heating energy. The ECRA Financial Model calculates total  
475 electricity consumption by applying the applicable equipment efficiencies, pumping  
476 factors, and distribution losses to the forecast thermal demand described in Section V.B  
477 above. The resulting electricity consumption (MWh of electrical input) is then multiplied  
478 by the forecast electricity rate to determine the annual electricity cost. The electricity rate  
479 used in the ECRA Financial Model is based on Rocky Mountain Power ("RMP")  
480 Schedule 6 — General Service, which is the applicable tariff schedule for the UCDEU's  
481 service classification.

482 **Q. Please describe the natural gas cost component modeled in the ECRA Financial**  
483 **Model.**

484 A. Natural gas is the primary fuel used to provide heating service at the UCDEU. Heating is  
485 produced using condensing natural gas boilers with a thermal efficiency of 0.92. The  
486 ECRA Financial Model calculates natural gas consumption by dividing the forecast  
487 heating demand by the boiler efficiency of 0.92, and then applying a distribution loss  
488 factor of 7 percent of heating energy delivered.

489 **Q. What natural gas rate is used in the ECRA Financial Model for the test period?**

490 A. The natural gas rate used in the ECRA Financial Model reflects the applicable Enbridge  
491 Gas Utah tariff schedule for the UCDEU's service classification. For the initial period of  
492 operations, the model applies the General Service schedule rate. As the utility's natural  
493 gas consumption grows with the buildout of the development, the model transitions to the  
494 Firm Service schedule beginning in 2027, reflecting the expected increase in contracted  
495 volumes and service requirements at that stage of operations.

496 **Q. Please describe the water and wastewater cost component modeled in the ECRA**  
497 **Financial Model.**

498 A. The district energy system requires water for system make-up and heat rejection  
499 processes associated with both cooling and heating operations. As described in Section  
500 V.B, the model applies water consumption factors of 0.6 gallons per kilowatt-hour of  
501 cooling energy produced and 0.1 gallons per kilowatt-hour of heating energy delivered,  
502 as derived from the engineering analysis documented in Corix Exhibit 6.2. The ECRA  
503 Financial Model applies the City of Vineyard Commercial Water Usage Rates to the

504 modeled water and wastewater consumption volumes to derive the annual water and  
505 wastewater cost for the test period, which totals \$18,842.

506 **Q. Please describe the chemicals, safety, and testing cost component modeled in the**  
507 **ECRA Financial Model.**

508 A. The district energy system requires chemical treatment of the hydronic loops to prevent  
509 corrosion, scaling, and biological growth, as well as periodic water quality testing and  
510 safety compliance activities. The ECRA Financial Model models these costs as annual  
511 amounts based on system size and operating requirements during the test period. The  
512 total chemicals, safety, and testing cost for the test period is \$7,179.

513 **Q. Was an Electric Demand Response Credit considered in the energy supply cost**  
514 **model?**

515 A. No. An Electric Demand Response Credit was not included in the ECRA Financial  
516 Model for the test period. At the time of this filing, insufficient information is available to  
517 produce a reliable forecast of demand response savings. The savings from any such  
518 program are expected to be very conservative given the early stage of utility operations,  
519 and no committed participation arrangements have been finalized. Corix will consider  
520 including a demand response credit in future Energy Charge pass-through applications as  
521 operational experience accumulates and program parameters become better defined.

522 *C. Total Energy Supply Costs*

523 **Q. What is the total energy supply cost for the test period as modeled in the ECRA**  
524 **Financial Model?**

525 A. The total energy supply costs for the test period, as derived from the ECRA Financial  
526 Model, are set out in Schedule 14 of GRC Application, Attachment 1, Appendix A, and  
527 summarized in GRUESO-BARON TABLE 7 below.

528 **GRUESO-BARON TABLE 7**

<b>Line</b>	<b>Energy Supply Cost Component</b>	<b>Test Year (\$)</b>
1	Electricity	\$97,367
2	Natural Gas	\$144,830
3	Water and Wastewater	\$18,842
4	Chemicals, Safety & Testing	\$7,179
<b>5</b>	<b>Total Energy Supply Costs</b>	<b>\$268,218</b>

529 *D. Energy Supply Revenue Requirement and Proposed Energy Charge*

530 **Q. How is the energy supply revenue requirement derived from the ECRA Financial**  
531 **Model?**

532 A. The energy supply revenue requirement for the test period is equal to the total forecast  
533 energy supply costs for the test period, as calculated in the ECRA Financial Model. The  
534 ECRA is the balancing account to ensure on a dollar-for-dollar basis that the actual  
535 purchased thermal energy supply costs are recovered in the actual Energy Charge  
536 revenues. Because energy supply costs are treated as pass-through costs, the energy  
537 supply revenue requirement is set equal to the forecast costs, with any variance between

538 forecast and actual costs captured in the ECRA deferral account and cleared in  
539 subsequent pass-through filings.

540 **Q. What is the proposed Energy Charge for the test period?**

541 A. The Energy Charge is measured in kilowatt-hours (kWh) and billed monthly. The Energy  
542 Charge is a variable charge. The proposed Energy Charge for the test period is derived by  
543 dividing the total energy supply revenue requirement by the total forecast thermal energy  
544 demand (in kWh), as calculated in the ECRA Financial Model (Highly Confidential  
545 Corix Exhibit 7.2) based on the test year unit costs. Specifically, the total energy supply  
546 cost of \$268,218 and carrying costs \$411 (total \$268,629) divided by the total test year  
547 thermal energy demand of 6,442,762 kWh yields a proposed Energy Charge of \$0.0417  
548 per kWh of thermal energy delivered.

549 Notice, the actual Energy Charge may vary from the forecast due to fluctuations  
550 in customers' energy demand. Additionally, energy supply costs may differ from  
551 projections in response to changes in energy consumption, energy tariffs, or unanticipated  
552 rate schedules changes. The ECRA mechanism is designed to account for all such  
553 variances, ensuring that any under or over recoveries of energy supply costs are  
554 addressed and passed through to customers in subsequent periods.

555 The regulatory foundation for the proposed Energy Charge and the ECRA  
556 mechanism is outlined in the testimony of Douglas Chong in Exhibit 3.0. The scope of  
557 this section is limited to the financial model derivation of the Energy Charge.

558

559

560 **Q. When does the proposed Energy Charge take effect, and when will it next be**  
561 **amended?**

562 A. The proposed Energy Charge would be effective from August 1, 2026, and be applicable  
563 until the next rate change. Corix proposes filing the pass-through by November 1, 2027,  
564 for rates effective January 1, 2028. This means the Energy Charge rates established  
565 initially for August 1, 2026, would be applicable from that date to December 31, 2027.  
566 When the rates are changed for January 1, 2028, UCDEU will be aligned with the  
567 beginning of the calendar year rate changes.

568 **VI. CAPITAL EXPENDITURES, PLANT IN SERVICE, CAPITAL ADDITIONS,**  
569 **CIAC, AND DEPRECIATION & AMORTIZATION**

570 **Q. What is the purpose of this section of your testimony?**

571 A. The purpose of this section is to explain how capital expenditures, Plant in Service,  
572 Contributions in Aid of Construction (CIAC), depreciation, and amortization are reflected  
573 in the UCDEU GRC Financial Model (Highly Confidential Corix Exhibit 7.1) for  
574 purposes of developing the delivery revenue requirement. This section is limited to  
575 describing the financial model treatment of these components and does not address  
576 engineering design, project execution, or the prudence of individual capital investments.  
577 Engineering design decisions, asset specifications, technical justifications, and the  
578 operational basis for useful life assumptions are addressed in the direct testimony of  
579 Derek Nelson (Corix Exhibit 6.0). My testimony covers the inputs to and outputs from  
580 the financial model as documented in Schedules 4 through 7 of GRC Application,  
581 Attachment 1, Appendix A.

582

583 *A. Capital Expenditures and Capital Additions*

584 **Q. What capital expenditure categories are included in the GRC Financial Model?**

585 A. The GRC Financial Model reflects forecast capital expenditures organized into three  
586 macro-categories: (1) Production Assets, comprising the central energy plant facilities  
587 that generate and distribute thermal energy; (2) Distribution Assets, comprising the  
588 Distribution Piping System (DPS) and Energy Transfer Stations (ETS); and (3) General  
589 Plant, comprising vehicles, office equipment, hardware, and other support assets. The  
590 total capital additions to the plant in service for the test period are set out in Schedule 5 of  
591 GRC Application, Attachment 1, Appendix A.

592 **Q. How are capital expenditure inputs sourced for the financial model?**

593 A. The total cost for each capital asset in the financial model is built up from the following  
594 components:

- 595 • Direct Costs – Estimated by Ramboll (Corix Exhibit 6.2) or derived from the applicable  
596 supply contract for the assets that will be capitalized in 2026.
- 597 • Project Management ("PM") Costs – Developed based on Corix's internal PM planning  
598 for each asset. More details about the resource planning could be found in Derek  
599 Nelson's testimony (Exhibit 6.0).
- 600 • Construction Insurance – Calculated at 0.15% of direct costs or derived from the  
601 applicable supply contract for the assets that will be capitalized in 2026.
- 602 • Contingency Allowance – Applied at 15% of direct costs to reflect inherent uncertainty in  
603 capital project estimates.
- 604 • Development, Start-Up, Transaction, Due Diligence, and Regulatory Costs – For assets  
605 capitalized in 2026, the model includes all associated costs related to the Certificate of

606 Public Convenience and Necessity ("CPCN") proceeding, the Company's first General  
607 Rate Case ("GRC"), and the development, start-up, transaction, due diligence, and  
608 regulatory costs.

609 **Q. How are production asset capital additions staged across the forecast period?**

610 A. Production asset capital additions reflect the staged commissioning of central energy  
611 facilities required to meet growing customer demand. Specifically:

- 612 • An Interim Energy Center (IEC) is placed in service in 2026, providing initial heating  
613 and cooling capacity for early-stage customers.
- 614 • The cooling capacity of the initial IEC is expanded in 2027, with the incremental  
615 investment placed in service in that year.
- 616 • A second TEC is placed in service in 2029 to support continued growth in customer  
617 demand.
- 618 • Following the interim facilities, three Permanent Energy Centers (PECs) are placed in  
619 service in subsequent years as required to meet longer-term demand growth.

620 This approach ensures that Plant in Service, depreciation, and rate base in the  
621 financial model reflect the actual timing of asset utilization, avoids premature inclusion  
622 of unused assets, and maintains a direct linkage between capital investment, customer  
623 growth, and the provision of regulated utility service.

624 **Q. How are distribution asset capital additions staged across the forecast period?**

625 A. For Distribution assets — specifically Energy Transfer Stations (ETS) and the  
626 Distribution Piping System (DPS) — capital costs are timed directly to the customer  
627 buildout and connection schedule. These assets are placed in service as individual  
628 buildings connect to the utility system. As a result, ETS and DPS investments enter Plant

629 in Service incrementally, aligned with the timing of customer connections rather than  
630 being placed in service in advance of demand.

631 ***B. Plant in Service and In-Service Timing***

632 **Q. What is Plant in Service and how is it reflected in the GRC Financial Model?**

633 A. Plant in Service represents utility capital assets that have been constructed and placed  
634 into service to provide regulated thermal service to customers. In the GRC Financial  
635 Model, Plant in Service includes capital investments associated with production facilities,  
636 distribution infrastructure, energy transfer stations, and other utility assets once they are  
637 available for use. The financial model reflects Plant in Service on a forecast basis  
638 consistent with the timing of capital additions and in-service dates. Only assets that are  
639 placed into service are included in Plant in Service for purposes of calculating  
640 depreciation, amortization, rate base, and the delivery revenue requirement.

641 **Q. How do capital additions flow from Construction Work in Progress to Plant in  
642 Service?**

643 A. Prior to an asset being placed in service, capital costs are accumulated in CWIP in the  
644 GRC Financial Model. During the construction period, the model accrues an Allowance  
645 for Funds Used During Construction (AFUDC) on eligible CWIP balances, which is  
646 capitalized and added to the cost of the asset when it is placed in service. AFUDC  
647 represents the cost of financing construction-period investments and is addressed in  
648 further detail in Section IX of this testimony. Upon completion and commissioning, the  
649 accumulated CWIP balance — comprising direct capital costs plus AFUDC — is  
650 transferred from CWIP and capitalized into Plant in Service. This approach ensures that  
651 Plant in Service, depreciation, and rate base in the financial model reflect the actual

652 timing of asset utilization, avoids premature inclusion of unused assets, and maintains a  
653 direct linkage between capital investment, customer growth, and the provision of  
654 regulated utility service.

655 ***C. Contributions in Aid of Construction (CIAC)***

656 **Q. What are Contributions in Aid of Construction and how are they treated in the**  
657 **GRC Financial Model?**

658 A. Contributions in Aid of Construction (CIAC) represent amounts contributed by third  
659 parties to fund utility capital investments. When CIAC is received, it is typically recorded  
660 as a reduction to gross Plant in Service for ratemaking purposes, such that the contributed  
661 portion of the asset is not included in rate base and is not recovered from customers  
662 through rates. The GRC Financial Model is structured to account for CIAC, if applicable,  
663 by reducing the Plant in Service balance and associated capital recovery components. The  
664 detailed Plant in Service by category, CIAC, and accumulated depreciation and  
665 amortization are set out in Schedule 5 of GRC Application, Attachment 1, Appendix A.

666 **Q. Is UCDEU expecting any CIAC during the test period?**

667 A. No. At this time, UCDEU is not expecting to receive any Contributions in Aid of  
668 Construction during the test period reflected in the GRC Financial Model. Accordingly,  
669 the model does not include any CIAC amounts and reflects Plant in Service on a gross  
670 basis. Because no CIAC is currently assumed, all forecast Plant in Service included in the  
671 GRC Financial Model is subject to depreciation, amortization, and inclusion in rate base  
672 consistent with standard ratemaking principles. There are no reductions to Plant in  
673 Service or capital recovery components associated with CIAC in the test period. If CIAC

674 were to be received in the future, the financial model can be updated in a subsequent  
675 General Rate Case to reflect the appropriate ratemaking treatment at that time.

676 ***D. Depreciation and Amortization***

677 **Q. What depreciation method is applied for regulatory book purposes?**

678 A. For regulatory book purposes, the GRC Financial Model applies the straight-line  
679 depreciation method to all Plant in Service asset categories, whereby the depreciable cost  
680 of each asset is recovered in equal annual amounts over its assigned useful life. This  
681 method is consistent with standard utility ratemaking practice and ensures that  
682 depreciation expense is calculated in a systematic, transparent, and repeatable manner.  
683 Depreciation categories in the GRC Financial Model group assets with similar  
684 characteristics and expected service lives. Each category is associated with a specific  
685 depreciation rate that is applied consistently across the forecast period. The technical  
686 basis and rationale for useful life assumptions are addressed by Derek Nelson in Corix  
687 Exhibit 6.0; my testimony is limited to the financial model inputs and their application in  
688 calculating depreciation expense.

689 **Q. What are the depreciation categories, useful lives, and rates applied in the financial  
690 model?**

691 A. The GRC Financial Model applies straight-line depreciation rates, useful lives, and asset  
692 categories that are detailed in Schedule 7 of the GRC Application, Attachment 1,  
693 Appendix A. To ensure accuracy and transparency, UCDEU has established distinct asset  
694 categories based on their assigned useful lives, rather than grouping multiple depreciation  
695 categories under a single facility type. This approach aligns depreciation expenses with  
696 the expected service duration of each asset, providing a clear and consistent framework

697 for calculating depreciation within the model. The categorization and associated rates are  
698 designed to reflect the unique characteristics and longevity of each asset class, supporting  
699 reliable cost recovery and compliance with standard regulatory practices.

700 **Q. How does depreciation and amortization expense affect the delivery revenue**  
701 **requirement?**

702 A. Depreciation and amortization expense represents the systematic recovery of invested  
703 capital over time and is included as a component of the UCDEU delivery revenue  
704 requirement. As Plant in Service grows with new capital additions, depreciation and  
705 amortization expense increases correspondingly, reflecting the expanded asset base used  
706 to provide service to customers. Depreciation and amortization expense is summarized in  
707 Schedule 5 of GRC Application, Attachment 1, Appendix A and the supporting detail is  
708 provided in the plant and depreciation schedules (4 to 7) of GRC Application,  
709 Attachment 1, Appendix A.

710 **Q. Does this section address the prudence or engineering design of capital assets?**

711 A. No. This section is limited to describing how capital expenditures, Plant in Service,  
712 CIAC, depreciation, and amortization are reflected in the UCDEU GRC Financial Model  
713 for purposes of developing the delivery revenue requirement. Engineering design  
714 decisions, asset specifications, and technical justifications are addressed in the testimony  
715 of Derek Nelson (Corix Exhibit 6.0).

## 716 VII. RATE BASE AND RATE BASE METHODOLOGY

717 **Q. What is the purpose of this section of your testimony?**

718 A. The purpose of this section is to explain how rate base is calculated and reflected in the  
719 UCDEU GRC Financial Model (Highly Confidential Corix Exhibit 7.1) for purposes of

720 developing the delivery revenue requirement. Specifically, this section describes the  
721 components of rate base, the mid-year rate base methodology applied in the model, the  
722 startup year weighted average rate base calculation, and the treatment of deferral  
723 accounts in rate base.

724 Rate base is the net capital investment upon which UCDEU is entitled to earn an  
725 authorized rate of return. The allowed return on rate base is a component of the delivery  
726 revenue requirement and is calculated by applying the weighted average cost of capital  
727 — comprised of the authorized return on equity and the cost of debt, as described in  
728 Section IX — to the rate base for each period.

729 **Q. What model schedule presents the rate base calculation?**

730 A. Schedule 3 of the GRC Financial Model presents the computation of rate base supporting  
731 the allowed return, including gross plant, accumulated depreciation, CWIP, working  
732 capital, deferrals as applicable, and net rate base. Schedule 3 is a view-only output  
733 schedule that pulls results from the model forecast tabs and input tabs. All rate base  
734 assumptions and inputs are updated in the relevant upstream tabs — Capex Inputs, O&M  
735 Inputs, General Inputs, and the Capex and OPEX forecast engines.

736 *A. Rate Base Components*

737 **Q. What components are included in the rate base calculation in the GRC Financial**  
738 **Model?**

739 A. Rate base in the GRC Financial Model is composed of the following components, each of  
740 which is described in the subsections below:

741

**GRUESO-BARON TABLE 8**

<b>Component</b>	<b>Description</b>	<b>Model Schedule</b>
Gross Plant in Service	Capital assets placed in service, at cost	Schedules 4 and 5
Less: Accumulated Depreciation & Amortization	Cumulative depreciation and amortization to date	Schedules 4 and 5
Less: CIAC	Contributions in Aid of Construction (if applicable)	Schedules 4 and 5
Plus: Working Capital	1/8 allowance (energy supply + O&M costs)	Schedule 8
Plus: Rate Base Deferrals (RDDA)	Revenue Deficiency Deferral Account balance	Schedule 9
ADIT	Cumulative net balance of all Deferred Tax Assets (DTA) and Liabilities (DTL) recorded to date	Schedule 15
<b>= Net Rate Base</b>	<b>Basis for computing allowed return</b>	<b>Schedule 3</b>

742

**i. Gross Plant in Service**

743

**Q. How is gross Plant in Service reflected in rate base?**

744

A. Plant in Service represents utility capital assets that have been constructed and placed

745

into service to provide regulated thermal service to customers. In the GRC Financial

746

Model, Plant in Service includes capital investments associated with the energy

747

production facilities, the distribution infrastructure, and other utility assets once they are

748

available for use. The GRC Financial Model reflects Plant in Service on a forecast basis

749

consistent with the timing of capital additions and in-service dates. Only assets that are

750 placed into service are included in Plant in Service for purposes of calculating  
751 depreciation, amortization, rate base, and the delivery revenue requirement.

752 Gross Plant in Service is the starting point for the rate base calculation. It  
753 represents the total original cost of utility assets in service and is reflected on a before-  
754 depreciation basis. The details of Plant in Service by asset category, opening and closing  
755 balances, and additions and retirements is presented in Schedule 5 of GRC Application,  
756 Attachment 1, Appendix A, which provides plant categories, opening and closing  
757 balances, additions and retirements, accumulated depreciation, and net book value by  
758 category.

759 **ii. Accumulated Depreciation and Amortization**

760 **Q. How is accumulated depreciation reflected in rate base?**

761 A. Accumulated depreciation and amortization represent the portion of gross Plant in  
762 Service that has been recovered through depreciation expense charged to customers in  
763 prior and current periods. In the GRC Financial Model, accumulated depreciation is  
764 deducted from gross Plant in Service to arrive at net Plant in Service, which forms the  
765 primary component of net rate base. The straight-line depreciation method is applied  
766 consistently to all Plant in Service asset categories, as described in Section VI of this  
767 testimony. Because UCDEU is a new greenfield utility commencing operations in 2026,  
768 there is no accumulated depreciation at the start of the test period, as this is the utility's  
769 first year of operation and depreciation will begin accruing only once assets are placed in  
770 service during the test period.

771 **iii. CIAC**

772 **Q. How is CIAC treated in rate base?**

773 A. As noted above, UCDEU is not expecting to receive any CIAC during the test period  
774 reflected in the GRC Financial Model. Accordingly, the model does not include any  
775 CIAC amounts and reflects Plant in Service on a gross basis. Because no CIAC is  
776 currently assumed, all forecast Plant in Service included in the GRC Financial Model is  
777 subject to depreciation, amortization, and inclusion in rate base consistent with standard  
778 ratemaking principles.

779 **iv. Working Capital**

780 **Q. How is working capital included in rate base?**

781 A. Working capital is included as a positive addition to rate base and represents the cash  
782 required to bridge the timing difference between when operating expenses are incurred  
783 and when revenues are collected from customers. As described in Section VIII of this  
784 testimony, working capital is calculated in the GRC Financial Model using the one-eighth  
785 (1/8) allowance, applied to the sum of energy supply costs and operating and  
786 maintenance costs. The resulting working capital amount is reflected in Schedule 8 of  
787 GRC Application, Attachment 1, Appendix A, which presents key expense drivers and  
788 working capital allowances by year, and is included in rate base through Schedule 3 of  
789 GRC Application, Attachment 1, Appendix A.

790 **v. Deferral Accounts**

791 **Q. What deferral accounts are reflected in rate base?**

792 A. The RDDA balance is included in rate base and earns a carrying charge at the authorized  
793 weighted average cost of capital. Schedule 9 of GRC Application, Attachment 1,

794 Appendix A presents the rate base deferral (RDDA) roll-forward, including the opening  
795 balance, additions representing the revenue shortfall, amortization or true-up, and ending  
796 balance. The regulatory framework governing the RDDA, including its establishment,  
797 amortization, and carrying charge mechanic, is addressed in the testimony of Douglas  
798 Chong (Corix Exhibit 3.0).

799 **vi. Accumulated Deferred Income Taxes (ADIT)**

800 **Q. How are Accumulated Deferred Income Taxes reflected in rate base?**

801 A. ADIT represents the cumulative net balance of all deferred tax assets and liabilities  
802 recorded to date. Such temporary differences are explained in detail in this testimony in  
803 Section X.

804 ADIT reflects the total accumulated timing difference between the  
805 accounting/regulatory books and tax books as of each forecast period. In the GRC  
806 Financial Model, ADIT is calculated as:

807 **ADIT = Cumulative Deferred Tax Assets (DTA) - Cumulative Deferred Tax**  
808 **Liabilities (DTL)**

809 When ADIT is a net liability position (i.e., cumulative DTLs exceed cumulative  
810 DTAs — as expected in the early years when MACRS depreciation creates DTLs), the  
811 ADIT balance is treated as a reduction to rate base, consistent with standard utility  
812 regulatory practice. This treatment reflects the view that accumulated deferred tax  
813 balances represent a source of funds provided by customers in advance of the related tax  
814 payments, which reduces the utility's net capital investment requiring a return.

815 Conversely, when ADIT is a net asset position (i.e., cumulative DTAs exceed  
816 cumulative DTLs — as may occur in periods when the RDDA deferred revenue DTA or

817 the Internal Revenue Code (IRC) §163(j) interest carryforward DTA dominates), the  
818 ADIT net asset position increases rate base, reflecting the fact that UCDEU has paid  
819 more tax in cash than has been recovered through the normalized tax allowance, and is  
820 entitled to earn a return on that over-payment until it reverses.

821 The ADIT balance by forecast year, and the component DTA and DTL balances,  
822 are presented in Schedule 15 of the GRC Application, Attachment 1, Appendix A, and  
823 the ADIT deduction from (or addition to) rate base is presented in Schedule 3 of the GRC  
824 Application, Attachment 1, Appendix A.

825 **Q. What deferral accounts are reflected in rate base?**

826 A. The RDDA balance is included in rate base and earns a carrying charge at the authorized  
827 weighted average cost of capital. Schedule 9 of GRC Application, Attachment 1,  
828 Appendix A presents the rate base deferral (RDDA) roll-forward, including the opening  
829 balance, additions representing the revenue shortfall, amortization or true-up, and ending  
830 balance. The regulatory framework governing the RDDA, including its establishment,  
831 amortization, and carrying charge mechanic, is addressed in the testimony of Douglas  
832 Chong (Corix Exhibit 3.0).

833 ***B. Mid-Year Rate Base Methodology***

834 **Q. What rate base methodology does the GRC Financial Model apply for years after**  
835 **the startup year?**

836 A. For all years after the startup year, the GRC Financial Model applies a mid-year rate base  
837 methodology. Under this approach, rate base for each year is calculated as the average of  
838 the opening and closing balances of net Plant in Service, working capital, and applicable

839            deferral accounts. This is equivalent to assuming that capital additions and retirements  
840            occur, on average, at the midpoint of the year.

841    **Q.    Why does the financial model use the mid-year methodology rather than a 13-month**  
842            **average?**

843    A.    The mid-year methodology is the more appropriate approach for UCDEU given the  
844            nature and pace of its capital investment program. UCDEU is a greenfield utility in a  
845            period of rapid and continuous capital growth, with significant Plant in Service Additions  
846            expected each year throughout the forecast period as new assets are commissioned to  
847            serve an expanding customer base. The 13-month average methodology is best suited to  
848            mature utilities with relatively stable, flat asset bases where the difference between  
849            beginning-of-year and end-of-year balances is modest and the 13-month average  
850            approximates the average investment held throughout the year.

851            Furthermore, the RDDA cannot be computed on a monthly basis; only the  
852            beginning and end-of-year balances are available. The actual year-end RDDA balance  
853            can only be determined once all year-end figures are finalized. Because the RDDA is  
854            included in rate base, this limitation makes the mid-year methodology the most  
855            appropriate approach for accurately reflecting the average capital investment during the  
856            year.

857            Finally, for a utility like UCDEU, which is adding substantial capital in each  
858            forecast year, the 13-month average would calculate rate base using 13 data points — the  
859            end-of-month balances for each month of the year plus the prior year-end balance —  
860            which in a high-growth environment does not materially improve accuracy over the  
861            simpler mid-year average. The mid-year methodology is transparent, directly traceable in

862 the financial model, and consistent with regulatory practice for greenfield utilities  
863 commencing operations during a rate period. It ensures that rate base reflects the average  
864 capital investment held in service during each year without introducing the data  
865 complexity of monthly balance tracking.

866 ***C. Startup Year Weighted Average Rate Base Methodology***

867 **Q. How is rate base calculated for the startup year (2026)?**

868 A. For the startup year (2026), the GRC Financial Model applies a weighted average Rate  
869 base calculation that reflects the actual timing of when assets are placed in service during  
870 the year. Because the initial assets are expected to be commissioned during 2026, a  
871 weighted average approach is applied to capture only the portion of the year during which  
872 each asset is actually in service, rather than assuming a full-year balance. This  
873 methodology is consistent with standard regulatory practice for a greenfield utility  
874 commencing operations during the rate period and ensures that depreciation expense and  
875 rate base reflect the actual period of asset utilization.

876 **Q. How does the weighted average approach differ from the mid-year methodology  
877 used in subsequent years?**

878 A. The startup year weighted-average approach is a more precise refinement of the mid-year  
879 concept, tailored specifically to the 2026 startup year. Rather than simply averaging  
880 opening and closing balances as in the standard mid-year approach, the weighted average  
881 method assigns each asset a weight proportional to the fraction of the year during which  
882 it is actually in service. For example, an asset commissioned on October 1, 2026, would  
883 contribute three months out of twelve — or one-quarter — of its full-year value to the  
884 2026 rate base, rather than one-half under a standard mid-year calculation.

885                   This level of precision is warranted for the startup year because Phase 1  
886                   commissioning events are expected to occur at specific, identifiable points during 2026,  
887                   and the financial model has sufficient information to track individual in-service dates.  
888                   Using actual commissioning timing avoids overstating rate base — by including assets  
889                   before they are in service — treating all assets as though they were placed in service at  
890                   the same point in time.

891                   For years 2027 onward, the standard mid-year methodology is applied, as the  
892                   weighted average calculation would not produce materially different results once the  
893                   utility is in continuous operation with assets entering service throughout each year.

894                   ***D. RDDA Treatment in Rate Base***

895   **Q.   How does the Revenue Deficiency Deferral Account (RDDA) interact with rate base**  
896   **in the financial model?**

897   A.   The RDDA is a rate base deferral mechanism established to address the revenue shortfall  
898   that arises during UCDEU's startup and growth period, when the delivery revenue  
899   requirement — reflecting full capital costs as assets are placed in service — exceeds the  
900   revenues collectable from customers at the approved levelized rate. As described in the  
901   testimony of Douglas Chong (Exhibit 3.0), the RDDA captures the annual shortfall and  
902   defers it for recovery in future periods as the customer base grows and revenues increase.

903                   In the GRC Financial Model, the RDDA balance is included as a component of  
904   rate base in Schedule 3, and Schedule 9 of GRC Application, Attachment 1, Appendix A  
905   presents the RDDA roll-forward, including the opening balance, additions reflecting the  
906   annual revenue shortfall, amortization or true-up, and ending balance. Because the  
907   RDDA is a rate base item, it earns a carrying charge at the authorized weighted average

908 cost of capital. This carrying charge is included in the revenue requirement and  
909 accumulates in the RDDA balance until it is recovered from customers.

910 **Q. Does this section address the regulatory framework or policy basis for the RDDA?**

911 A. No. The regulatory framework governing the RDDA — including its establishment, the  
912 carrying charge formula, and the amortization mechanism — is addressed in the  
913 testimony of Douglas Chong (Corix Exhibit 3.0). This section is limited to explaining  
914 how the RDDA balance is incorporated into rate base and reflected as a model input and  
915 output in the GRC Financial Model (Highly Confidential Corix Exhibit 7.1).

916 **VIII. OPERATING EXPENSES AND WORKING CAPITAL**

917 **Q. What is the purpose of this section of your testimony?**

918 A. The purpose of this section is to explain how operating expenses and working capital are  
919 calculated and reflected in the UCDEU GRC Financial Model for purposes of developing  
920 the delivery revenue requirement. This section describes the financial model treatment of  
921 operating and maintenance costs and the calculation of working capital, consistent with  
922 the structure and schedules of the GRC Financial Model.

923 ***A. Operating Expenses***

924 **Q. What operating expenses are included in the delivery revenue requirement and  
925 where are they presented in the financial model?**

926 A. Operating expenses included in the delivery revenue requirement represent the recurring  
927 costs required to operate and administer the utility on a day-to-day basis. These operating  
928 expenses are reflected in Schedules 12 and 13 of GRC Application, Attachment 1,  
929 Appendix A. They include direct labor costs, maintenance costs, insurance, office-related

930 expenses, customer billing costs, regulatory costs, allocated Regional and Corporate  
931 services costs, and other miscellaneous operating expenses.

932 This subsection explains how each operating expense category is calculated and  
933 reflected in the financial model. Capital recovery costs, including depreciation,  
934 amortization, and return on invested capital, are addressed separately in section IX of this  
935 testimony.

936 **i. Direct Labor**

937 **Q. How are direct labor operating expenses calculated?**

938 A. Direct labor operating expenses are calculated based on forecasted full-time equivalent  
939 ("FTE") resources required to operate the utility as system operations scale and additional  
940 assets are placed into service. The planning of FTE resources reflects the escalation of  
941 operational requirements associated with the growth of Plant in Service, as described in  
942 Section VII. The necessity and appropriateness of the FTE resources included in the  
943 financial model are assessed in the testimony of Derek Nelson (Corix Exhibit 6.0).

944 Annual base salaries for each position are established using labor market  
945 benchmarks appropriate for the roles required to support utility operations. Benefits and  
946 incentive costs are then calculated as a function of the base salary for each position,  
947 resulting in a fully loaded annual labor cost for each FTE.

948 UCDEU does not have its own dedicated employees. Instead, operational  
949 personnel are provided by a Corix affiliate and charge labor directly to UCDEU. The  
950 financial model reflects this direct labor costs based on the fully loaded cost of the  
951 planned FTE resources, which are included as direct labor operating expenses for  
952 purposes of calculating the delivery revenue requirement.

953        **ii. Maintenance Costs**

954        **Q. How are maintenance costs reflected in operating expenses?**

955        A. Maintenance costs are calculated using a percentage of gross Plant in Service approach  
956        that reflects how maintenance requirements evolve as utility assets age. This  
957        methodology is implemented in the GRC Financial Model to ensure that forecasted  
958        maintenance expenses are reasonable, scalable, and consistent with the maturity of the  
959        district energy system.

960                The calculation is performed in two steps. First, a baseline maintenance factor  
961        was developed by estimating the ratio of maintenance services costs to gross Plant in  
962        Service for a representative thermal district energy utility operating in a steady-state  
963        period (Exhibit 7.5 WP - Maintenance cost estimates %), defined as approximately five  
964        to ten years of operation. This analysis establishes a normalized maintenance cost level  
965        relative to asset size once the system has reached stable operations.

966                Second, an adjustment factor is applied to the baseline maintenance percentage to  
967        reflect the expected progression of maintenance intensity over the life of the assets.

968        Specifically, the model applies:

- 969        • Factor for Year 1(0.0): Newly commissioned assets require minimal maintenance
- 970        • Factor for Year 1(0.5): Ramp-up period as operations stabilizes
- 971        • Factor for Year 1(1.0): Steady-state maintenance conditions
- 972        • Factor beyond year10 (1.5): Increasing maintenance needs as plant and equipment age

973                By applying this adjusted maintenance percentage to gross Plant in Service, the  
974        financial model captures the relationship between asset growth, asset aging, and  
975        maintenance costs. This approach incorporates the fact that maintenance expenses increase

976 over time as assets remain in service longer. Depreciation and amortization are excluded  
977 from this calculation and are addressed separately in Section VII.

978 **iii. Insurance**

979 **Q. How are insurance costs reflected in operating expenses?**

980 A. Insurance costs are included as operating expenses and represent the cost of maintaining  
981 insurance coverage necessary to operate the utility. UCDEU's insurance program includes  
982 Property Insurance, Environmental Insurance, General Liability insurance, and other  
983 related insurance coverages.

984 Corix procures Property Insurance, General Liability insurance, and other  
985 corporate insurance policies on a group basis for its utilities and affiliated entities. The  
986 costs of these group insurance policies are subsequently allocated to individual utilities,  
987 including UCDEU, using cost allocation methodologies that reflect cost causation.  
988 Property Insurance costs are allocated to UCDEU based on gross Plant in Service, while  
989 General Liability and other insurance costs are allocated based on revenue.  
990 Environmental insurance is procured directly for UCDEU and is not subject to group  
991 allocation.

992 The GRC Financial Model reflects the projected insurance costs allocated to  
993 UCDEU for 2026 as the base year for forecasting. Insurance costs are escalated at 7.5  
994 percent annually from 2026 through 2030, based on analysis provided by Corix's  
995 insurance broker regarding expected insurance cost trends. For years after 2030,  
996 insurance costs are escalated at 3 percent annually. In the case of Property Insurance, the  
997 model also accounts for the growth in Plant in Service over time, which increases the  
998 insurance base and corresponding insurance costs.

999 All insurance costs are expensed in the period incurred and are included as  
1000 operating expenses for purposes of calculating the delivery revenue requirement.  
1001 Insurance costs are not capitalized and do not form part of Plant in Service or rate base.

1002 **iv. Office Rental**

1003 **Q. How are office rental costs reflected in the operating expense forecast?**

1004 A. Office rental costs represent the cost of office space required to support UCDEU's  
1005 operations and administration. The office lease contract has been drawn up, and the GRC  
1006 Financial Model incorporates the contracted monthly lease amount reflected in that  
1007 agreement.

1008 These costs are included as operating expenses and are expensed in the period  
1009 incurred. Office rental costs are not capitalized and do not form part of Plant in Service or  
1010 rate base. The forecast reflects the lease terms executed and provides a stable and  
1011 supportable basis for office rental expenses included in the delivery revenue requirement.

1012 **v. Customer Billing**

1013 **Q. How are customer billing costs calculated?**

1014 A. Customer billing costs included in operating expenses reflect third-party billing system  
1015 costs only, specifically software license fees and the amortization of billing software.  
1016 These costs do not include internal labor or departmental costs associated with billing and  
1017 customer care.

1018 Billing software and related services are procured by Corix on a group basis for  
1019 its utilities and affiliated entities. The total third-party billing costs are subsequently  
1020 allocated to individual utilities, including UCDEU, using the number of issued bills per

1021 utility per year as the operational cost allocator. This approach reflects cost causation by  
1022 aligning billing system costs with billing activity.

1023 The internal costs associated with billing and customer care functions, including  
1024 labor and other departmental expenses, are not included in this billing cost line item.

1025 Those internal costs are allocated to UCDEU through the Regional services cost  
1026 allocations described in subsection vii below.

1027 All customer billing costs included in this line item (Line 52 of Schedules 12 of  
1028 GRC Application, Attachment 1, Appendix A) are expensed in the period incurred and  
1029 are included in operating expenses for purposes of calculating the delivery revenue  
1030 requirement.

1031 **vi. GRC External Consultant Costs**

1032 **Q. How are GRC external consultant costs treated in the operating expenses?**

1033 A. GRC external consultant costs represent the third-party professional services required to  
1034 support UCDEU's regulatory filings. After its first GRC, UCDEU plans to file a General  
1035 Rate Case annually beginning in 2028, and the external consultant costs associated with  
1036 those future GRC filings are reflected as operating expenses in the GRC Financial Model.

1037 All costs related to the CPCN application and the initial GRC filing are not  
1038 included as operating expenses. Those costs were capitalized and included as part of the  
1039 utility assets placed into service in 2026. As a result, CPCN-related and first GRC  
1040 consultant costs are recovered through capital recovery mechanisms rather than through  
1041 operating expenses.

1042 The operating expense forecast therefore includes only the ongoing external  
1043 consultant costs associated with subsequent future GRC filings. These costs are expensed

1044 in the period incurred and included in the delivery revenue requirement, while  
1045 depreciation and amortization associated with capitalized regulatory costs are addressed  
1046 separately in Section VII.

1047 **vii. Regional and Corporate Services**

1048 **Q. How are Regional and Corporate services costs reflected in operating expenses and**  
1049 **recovered in rates?**

1050 A. UCDEU receives certain Regional and Corporate support services from Corix affiliates.  
1051 The cost allocation methodologies used to allocate these services to UCDEU are  
1052 addressed in the testimony of Errol South (Corix Exhibit 2.0), with supporting cost  
1053 allocation manuals filed as Corix Exhibit 2.5 (Regional Cost Allocation Manual) and  
1054 Corix Exhibit 2.6 (Corporate Cost Allocation Manual). This section focuses on how the  
1055 forecasted costs and recoverable amounts are reflected in the GRC Financial Model.

1056 The forecasted Regional and Corporate services costs included in operating  
1057 expenses are based on internal Corix budgets for the applicable support functions. These  
1058 budgeted amounts represent the expected cost of providing support services to UCDEU  
1059 during the test period and are reflected in the O&M Inputs tab of the GRC Financial  
1060 Model.

1061 Not all allocated Regional and Corporate service costs are proposed to be  
1062 recovered from customers. The GRC Financial Model applies explicit recoverability  
1063 adjustments to distinguish between total allocated costs and the portion included in the  
1064 delivery revenue requirement. Schedule 12, lines 119 through 122, and Schedule 13, line  
1065 19 of GRC Application, Attachment 1, Appendix A reflect the adjustments to operating  
1066 and maintenance expenses resulting from the non-recoverability of certain direct labor,

1067 Regional services, and Corporate services costs. These schedule-level adjustments ensure  
1068 that only the recoverable portion of allocated costs is included in operating expenses for  
1069 ratemaking purposes.

1070 Certain cost components are excluded from recovery at all levels. Costs  
1071 associated with the Long-Term Incentive Program ("LTIP") are excluded from recovery  
1072 regardless of whether they arise in direct labor costs, Regional services, or Corporate  
1073 services costs. In addition, Corporate Development expenses at the corporate level are  
1074 treated as non-recoverable and are excluded from the delivery revenue requirement.

1075 **viii. Miscellaneous Operating Expenses**

1076 **Q. What miscellaneous operating expenses are included in the model?**

1077 A. Miscellaneous operating expenses include operating costs that are necessary to support  
1078 UCDEU's day-to-day activities but are not captured in other specific operating expense  
1079 categories. These costs include office utilities, phone and internet services, office  
1080 expenses and materials, and travel and accommodation expenses for direct labor  
1081 employees.

1082 These miscellaneous expenses were estimated using operating cost references  
1083 from other Corix utilities with similar operational characteristics. Given UCDEU's status  
1084 as a new utility without historical operating data, this benchmarking approach provides a  
1085 reasonable basis for forecasting these costs in the GRC Financial Model.

1086 The forecast of miscellaneous operating expenses is expected to be refined in  
1087 future General Rate Cases as UCDEU develops operating history and actual cost  
1088 experience. All miscellaneous expenses are expensed in the period incurred and are

1089 included in operating expenses for purposes of calculating the delivery revenue  
1090 requirement.

1091 ***B. Working Capital***

1092 **Q. How is working capital reflected in the GRC Financial Model?**

1093 A. The GRC Financial Model calculates working capital using the one-eighth (1/8)  
1094 allowance. Working capital is calculated as one-eighth of the subtotal of energy supply  
1095 costs (as described in Section V), operating and maintenance costs (as described in  
1096 subsection A of this section), and other costs, which are currently reflected as zero in the  
1097 model.

1098 The resulting working capital amount is reflected in Schedule 8 of GRC  
1099 Application, Attachment 1, Appendix A and is included in the revenue requirement to  
1100 recognize the cash required to bridge the timing difference between when expenses are  
1101 incurred and when revenues are collected.

1102 **Q. Why does the model use the 1/8 allowance instead of a lead-lag study?**

1103 A. The 1/8 allowance provides a practical and proportionate approach to estimating working  
1104 capital for a new utility such as UCDEU, particularly in the absence of sufficient  
1105 historical data to support a detailed lead-lag study. UCDEU does not yet have stable  
1106 billing, collection, and payment experience from which reliable revenue lags and expense  
1107 leads could be calculated.

1108 Applying the 1/8 allowance enables the model to estimate working capital  
1109 requirements transparently, as it links directly to forecast cash expenses and does not rely  
1110 on speculative assumptions. As UCDEU gains operating experience, the working capital  
1111 methodology can be reassessed and updated in future General Rate Cases if needed.

1112

***C. Bad Debt Allowance***

1113 **Q. Does the GRC Financial Model include a bad debt allowance for the test period?**

1114 A. No. There is no bad debt recovery included in the test year. This is appropriate given that  
1115 UCDEU is a new startup utility commencing operations in 2026 with a single customer  
1116 — Flagborough — under a contractual arrangement governed by the District Energy  
1117 Services Agreement ("DESA"). The contractual nature of the customer relationship,  
1118 combined with the absence of any historical bad debt experience, does not support the  
1119 inclusion of a bad debt reserve in the test year operating expenses. Corix will evaluate the  
1120 appropriateness of including a bad debt allowance in future General Rate Case  
1121 applications as the utility accumulates operating history and as the customer base  
1122 potentially expands. Corix's bad debts internal policy is presented in Exhibit 7.6 - Corix  
1123 Bad Debts Policy.

1124 **IX. COST OF CAPITAL AND CAPITAL-RELATED COSTS**

1125 **Q. What is the purpose of this section of your testimony?**

1126 A. The purpose of this section is to explain how cost of capital inputs are reflected in the  
1127 UCDEU GRC Financial Model for purposes of developing the delivery revenue  
1128 requirement. Specifically, this section describes how the authorized capital structure, the  
1129 return on equity, the cost of debt, and the AFUDC are incorporated as model inputs and  
1130 how they flow through the model to produce the capital-related cost components of the  
1131 delivery revenue requirement.

1132 The determination of the appropriate capital structure, return on equity, and cost  
1133 of debt for UCDEU is addressed in the testimony of Maxwell Wang, Chief Financial  
1134 Officer of Corix (Corix Exhibit 4.0), and in the expert testimony of Josh Figueroa of The

1135 Brattle Group (Corix Exhibit 5.0). My testimony is limited to explaining how those cost-  
1136 of-capital parameters are implemented as inputs in the GRC Financial Model and how  
1137 they produce the return on rate base and interest expense components of the revenue  
1138 requirement.

1139 **Q. What model schedule presents the cost of capital and return on rate base**  
1140 **calculation?**

1141 A. Schedule 11 of GRC Application, Attachment 1, Appendix A presents the cost of capital,  
1142 deemed capital structure, and return on rate base, including debt and equity ratios, the  
1143 authorized ROE, the cost of debt, the weighted average cost of capital, and the return  
1144 calculation. Schedule 11 is a view-only output schedule that pulls results from the model  
1145 forecast tabs and General Inputs tab. All cost of capital assumptions are entered as inputs  
1146 in the General Inputs tab of the GRC Financial Model, which contains regulatory dates,  
1147 financing structure, allowed ROE, and other global inputs referenced broadly by forecast  
1148 engines and schedules.

1149 *A. Capital Structure*

1150 **Q. What capital structure is used in the GRC Financial Model?**

1151 A. The GRC Financial Model applies a capital structure of 50% debt and 50% equity as a  
1152 model input. This capital structure is entered in the General Inputs tab and is applied  
1153 consistently across the forecast period in Schedule 11 of GRC Application, Attachment 1,  
1154 Appendix A to calculate the weighted average cost of capital and the resulting return on  
1155 rate base.

1156

1157

1158 **Q. What is the basis for the 50%/50% capital structure?**

1159 A. The 50% debt and 50% equity capital structure was negotiated between Corix and  
1160 Flagborough and is reflected in the Infrastructure Agreement — Fee Framework. Those  
1161 negotiated terms are now included in this GRC, which was contemplated if UCDEU were  
1162 to become a regulated utility. The basis for and reasonableness of this capital structure is  
1163 addressed in detail in the testimony of Maxwell Wang (Corix Exhibit 4.0) and the expert  
1164 testimony of Josh Figueroa of The Brattle Group (Corix Exhibit 5.0). My testimony is  
1165 limited to confirming how the 50%/50% split is implemented as a model input.

1166 **Q. Has an independent expert reviewed the reasonableness of the capital structure?**

1167 A. Yes. Corix retained Josh Figueroa from The Brattle Group to provide his opinion on the  
1168 cost of capital included in the GRC. The Brattle Group reviewed the capital structure of  
1169 50% debt and 50% equity, the ROE of 10.5%, and the cost of debt of 7.49%, and  
1170 concluded all were reasonable for UCDEU.

1171 ***B. Return on Equity***

1172 **Q. What return on equity is reflected in the GRC Financial Model?**

1173 A. The GRC Financial Model applies an authorized return on equity ("ROE") of 10.50% as  
1174 a model input. This ROE is entered in the General Inputs tab and is used in Schedule 11  
1175 of GRC Application, Attachment 1, Appendix A to calculate the equity return component  
1176 of the weighted average cost of capital and the resulting equity return dollar amount  
1177 included in the delivery revenue requirement.

1178 **Q. What is the basis for 10.50% ROE?**

1179 A. The ROE of 10.50% was negotiated between Corix and Flagborough and is reflected in  
1180 the Infrastructure Agreement — Fee Framework. The basis for and reasonableness of the

1181 10.50% ROE is addressed in detail by Maxwell Wang (Corix Exhibit 4.0) and Josh  
1182 Figueroa (Corix Exhibit 5.0). My testimony is limited to confirming that the 10.50%  
1183 ROE is implemented as a model input in the General Inputs tab and applied consistently  
1184 across the forecast period.

1185 **Q. What is the resulting equity return dollar amount included in the revenue**  
1186 **requirement?**

1187 A. The equity return dollar amount is calculated in Schedule 11 of the GRC Financial Model  
1188 by applying the 50% equity weight and the 10.50% authorized ROE to the net rate base  
1189 for each forecast period. The resulting equity return for the test year (August 1, 2026 –  
1190 July 31, 2027) is \$1,257,173, as reflected in Schedule 11 of the GRC Application,  
1191 Attachment 1, Appendix A. This amount is included in the delivery revenue requirement  
1192 as the equity return component of the return on rate base.

1193 ***C. Cost of Debt and Interest Expense***

1194 **Q. What cost of debt is reflected in the GRC Financial Model?**

1195 A. The GRC Financial Model reflects a test year's cost of debt of 7.49%, based on the rate  
1196 established under the Intercompany Credit Agreement between UCDEU and its Corix  
1197 affiliate lender. This rate is calculated in the Interest rate tab of the GRC Financial model  
1198 and applied to the debt portion of rate base in Schedule 11 of GRC Application,  
1199 Attachment 1, Appendix A to calculate the interest expense component of the return on  
1200 rate base and the delivery revenue requirement.

1201 **Q. How is the 7.49% test year interest rate derived?**

1202 A. In accordance with the Intercompany Credit Agreement, the actual interest rate is  
1203 variable and based on the market interest rate when the loan is outstanding. The specific

1204 rate formula and its components are confidential and are addressed in the testimony of  
1205 Maxwell Wang (Corix Exhibit 4.0). The 7.49% test year rate represents the estimated  
1206 cost of debt for the test year (August 1, 2026 – July 31, 2027) derived by applying the  
1207 formula set out in the Intercompany Credit Agreement to prevailing market interest rate  
1208 conditions as of the date of this filing.

1209 **Q. What is the resulting interest expense dollar amount included in the delivery**  
1210 **revenue requirement?**

1211 A. The interest expense dollar amount is calculated in Schedule 11 of GRC Application,  
1212 Attachment 1, Appendix A by applying the 50% debt weight and the 7.49% test year cost  
1213 of debt to the net rate base for each forecast period. The resulting interest expense for the  
1214 test year (August 1, 2026 – July 31, 2027) is \$896,783, as reflected in Schedule 11 of the  
1215 GRC Financial Model. This amount is included in the delivery revenue requirement as  
1216 the debt return component of the return on rate base.

1217 ***D. Reconciliation: Regulatory vs. Financial Books***

1218 **Q. Is there a difference between how interest expense is treated in the regulatory**  
1219 **revenue requirement and how it is recorded in UCDEU's financial books?**

1220 A. Yes. In the GRC Financial Model, interest expense included in the delivery revenue  
1221 requirement is calculated on a regulatory basis by applying the authorized cost of debt to  
1222 the deemed debt component of rate base, consistent with the 50%/50% capital structure.  
1223 This regulatory interest expense represents the debt return component of the allowed  
1224 return on rate base included in the revenue requirement for ratemaking purposes.

1225 For financial accounting purposes, the actual interest costs incurred by UCDEU  
1226 under the Intercompany Credit Agreement may differ from the regulatory interest

1227 expense, reflecting differences between the actual outstanding loan balance and the  
1228 deemed debt component of rate base, and any variation in the market-based interest rate  
1229 during the period. The GRC Financial Model does not explicitly track or reconcile the  
1230 difference between regulatory and financial book interest expense. The regulatory  
1231 revenue requirement is determined solely on the basis of the authorized cost of capital  
1232 inputs described in this section, and any difference between regulatory and financial book  
1233 treatment does not affect the delivery revenue requirement.

1234 *E. Allowance for Funds Used During Construction (AFUDC)*

1235 **Q. What is the Allowance for Funds Used During Construction and why is it included**  
1236 **in the GRC Financial Model?**

1237 A. AFUDC is a regulatory method of compensating a utility for the financing costs it incurs  
1238 during construction of new facilities. Since typical utility regulation does not allow the  
1239 utility to put the cost of a new facility into rates until it is in service, AFUDC offers a way  
1240 for the utility to recover its pre-operational financing costs. Utilities finance construction  
1241 of facilities with both borrowed funds (debt) and retained earnings (equity), and the  
1242 financing costs must account for both the cost of debt and a reasonable return on equity.

1243 UCDEU is a capital-intensive greenfield utility with significant construction  
1244 activity throughout the forecast period, and AFUDC is a material component of the  
1245 capitalized cost of assets placed in service. Without AFUDC, the financing costs incurred  
1246 during construction would not be recovered, resulting in an under-recovery of capital  
1247 costs and an understatement of Plant in Service.

1248

1249

1250 **Q. How is AFUDC calculated in the GRC Financial Model?**

1251 A. Prior to an asset being placed in service, capital costs are accumulated in CWIP in the  
1252 GRC Financial Model. During the construction period, the model accrued AFUDC on  
1253 eligible CWIP balances, which is capitalized and added to the cost of the asset when it is  
1254 placed in service. AFUDC is calculated by applying the weighted average cost of capital  
1255 — comprising both debt and equity components at the authorized rates — to the average  
1256 eligible CWIP balance during each period. The AFUDC rate reflects both the authorized  
1257 cost of debt (7.49% test year rate) and the authorized ROE (10.50%), weighted at the  
1258 50%/50% capital structure.

1259 **Q. What assets are eligible for AFUDC accrual?**

1260 A. AFUDC is accrued on eligible CWIP balances during the active construction period —  
1261 that is, while capital costs are accumulated in CWIP and before the related assets are  
1262 placed in service. Schedule 6 of GRC Application, Attachment 1, Appendix A presents  
1263 the capital expenditure and the accrued AFUDC components for both ROE and interest.  
1264 AFUDC ceases to accrue once an asset is transferred from CWIP to Plant in Service upon  
1265 commissioning. Assets already placed in service are not eligible for AFUDC accrual.

1266 **Q. How is AFUDC treated once an asset is placed in service?**

1267 A. Upon completion and commissioning, the accumulated CWIP balance — comprising  
1268 direct capital costs plus AFUDC — is transferred from CWIP and capitalized into Plant  
1269 in Service. As a result, AFUDC is embedded in the capitalized cost of the asset, is subject  
1270 to depreciation over the asset's useful life, and is included in the gross Plant in Service  
1271 balance that forms the starting point for the rate base calculation. This treatment ensures  
1272 that the full cost of constructing and financing UCDEU's capital assets is reflected in rate

1273 base and recovered from customers over the life of those assets through depreciation  
1274 expense and the allowed return on rate base.

1275 **Q. What is the total AFUDC amount reflected in the GRC Financial Model?**

1276 A. The GRC Financial Model reflects AFUDC accruals across two distinct periods. During  
1277 the pre-test year construction period — representing the period of active construction  
1278 prior to the commencement of the test year on August 1, 2026, which is also the date that  
1279 the utility commences service — total AFUDC accrued on eligible CWIP balances  
1280 amounts to \$ 1,100,175. During the test year (August 1, 2026 – July 31, 2027), AFUDC  
1281 continues to accrue on eligible CWIP balances associated with ongoing construction of  
1282 the initial assets and subsequent capital additions. Total AFUDC for the test year amounts  
1283 to \$296,913, as reflected in Schedule 6 of the GRC Financial Model (Exhibit 7.1). Both  
1284 the pre-test year and test year AFUDC amounts comprise equity and debt components,  
1285 each calculated by applying the respective weighted cost to the average eligible CWIP  
1286 balance during the applicable period.

1287 **X. TAXES**

1288 **Q. What is the purpose of this section of your testimony?**

1289 A. The purpose of this section is to explain how taxes are reflected in the UCDEU GRC  
1290 Financial Model for purposes of developing the delivery revenue requirement. This  
1291 section is organized in two parts: Part A addresses taxes other than income tax, including  
1292 property tax, franchise fees payable to the City of Vineyard, and energy-related sales  
1293 taxes on natural gas and electricity; and Part B addresses income tax, including the  
1294 applicable federal and Utah state tax rates, tax depreciation methodology, bonus  
1295 depreciation treatment, the Utah High-Cost Infrastructure Tax Credit ("HCITC"), the

1296 treatment of deferred tax balances, and the business interest expense limitation under  
1297 Internal Revenue Code (IRC) §163(j). My testimony describes how each tax component  
1298 is modeled and how the resulting tax expense or credit flows through to the delivery  
1299 revenue requirement. Schedule 15 of GRC Application, Attachment 1, Appendix A  
1300 presents the taxable income bridge, tax depreciation schedules, deferred taxes, and tax  
1301 expense. Tax policy determinations and the legal basis for each tax item are outside the  
1302 scope of my testimony as financial model developer.

1303 *A. Taxes Other Than Income Tax*

1304 **Q. What taxes other than income tax are addressed in this section?**

1305 A. Taxes other than income tax considered in the UCDEU GRC Financial Model include  
1306 property tax, Public Utilities Regulation Fee, franchise fees payable to the City of Utah  
1307 City, energy-related sales taxes on natural gas and electricity supply costs, and federal  
1308 payroll-related taxes. Each is addressed in the subsections below.

1309 **i. Property Tax**

1310 **Q. How are property tax expenses calculated?**

1311 A. No property tax expense is included for UCDEU in the GRC Financial Model. Based on  
1312 UCDEU's current circumstances and applicable tax treatment, the utility does not incur  
1313 property tax obligations on its Plant in Service during the forecast period. As a result,  
1314 property tax expenses are not reflected in operating expenses and are not included in the  
1315 delivery revenue requirement.

1316 **ii. Public Utilities Regulation Fee (PURF)**

1317 **Q. How is the Public Utilities Regulation Fee (PURF) reflected in operating expenses?**

1318 A. PURF is included as a tax other than income tax and represents the regulatory fee  
1319 assessed to recover the Public Service Commission's costs of regulating public utilities.

1320 In the GRC Financial Model, the PURF is calculated by applying the average  
1321 PURF rate over the most recent three-year period to UCDEU's prior year operating  
1322 revenue. This approach reflects the manner in which the PURF is assessed and provides a  
1323 reasonable basis for forecasting the fee in the absence of utility-specific historical data.

1324 The PURF is treated as a recurring tax other than income tax and is expensed in  
1325 the period incurred.

1326 **iii. Charges from the City of Vineyard**

1327 **Q. Are charges from the city of Vineyard reflected in the GRC Financial Model?**

1328 A. No. The GRC Financial Model does not currently include any charges from the City of  
1329 Vineyard. As of the test period, the Company has not been assessed, nor has it agreed to  
1330 pay, any municipal fees, franchise fees, right-of-way charges, or similar impositions by  
1331 the City of Vineyard in connection with the operation of the UCDEU System. Should any  
1332 such charges be established and become effective during or after the test period, the  
1333 Company would seek appropriate regulatory treatment at that time.

1334 **iv. Energy-Related Sales Taxes on Natural Gas and Electricity**

1335 **Q. Are energy-related sales taxes reflected in the GRC Financial Model?**

1336 A. Yes, but these taxes are included as part of energy supply costs rather than as delivery  
1337 operating expenses, and they are recovered through the energy charge rather than the  
1338 delivery charge. Specifically, two energy-related taxes are embedded in the natural gas

1339 and electricity commodity costs modeled in the GRC Financial Model: Utah State Sales  
1340 Tax, applied at a rate of 4.85% on natural gas and electricity purchases; and the  
1341 Municipal Energy Sales and Use Tax ("MET"), applied at a rate of 6.0% on natural gas  
1342 and electricity purchases within the applicable municipal jurisdiction. Together, these two  
1343 taxes are included in the commodity cost of energy supply inputs and are reflected in  
1344 Schedule 14 of GRC Application, Attachment 1, Appendix A. Because they form part of  
1345 the energy supply cost, they are recovered through the energy charge component of the  
1346 tariff and are not included in the delivery revenue requirement. The energy charge  
1347 recovery mechanism and the treatment of energy supply costs are described in Section V  
1348 of this testimony.

1349 **v. Federal Payroll Taxes**

1350 **Q. How are federal payroll taxes treated in the GRC Financial Model?**

1351 A. Federal payroll taxes, including the employer portion of Social Security and Medicare  
1352 taxes (FICA), are not reflected as a separate tax line item in the tax section of the GRC  
1353 Financial Model. Rather, these costs are embedded within the fully loaded labor cost for  
1354 each FTE position, as described in Section VIII of this testimony. Because payroll taxes  
1355 are calculated as a function of base salary and are included in the benefits loading applied  
1356 to each FTE, they are captured within the direct labor operating expense component of  
1357 the delivery revenue requirement and are not separately reported in Schedules 12 and 13  
1358 of GRC Application, Attachment 1, Appendix A.

1359 *B. Income Tax*

1360 **i. Payable Federal Income Tax**

1361 **Q. How is the current federal income tax payable calculated in the GRC Financial**  
1362 **Model?**

1363 A. The current federal income tax payable is reported in Schedules 15 of GRC Application,  
1364 Attachment 1, Appendix A. The computation follows a standard taxable income bridge  
1365 that begins with regulatory book pre-tax income and applies the following adjustments to  
1366 arrive at federal taxable income:

- 1367 a) **Add back regulatory book depreciation and amortization:** Straight-line book  
1368 depreciation and amortization, as computed under the regulatory depreciation  
1369 methodology described in Section VI of this testimony, is added back to book income  
1370 because it is replaced by MACRS tax depreciation in item (ii) below.
- 1371 b) **Deduct MACRS tax depreciation:** MACRS accelerated tax depreciation on eligible  
1372 Plant in Service is deducted in place of book depreciation. Because MACRS front-loads  
1373 depreciation deductions relative to straight-line book depreciation, taxable income is  
1374 lower than book income in the early years of each asset's life, giving rise to a Deferred  
1375 Tax Liability (DTL). The MACRS methodology and asset class assignments are  
1376 described in Section X.iii of this testimony.
- 1377 c) **Deduct deferred revenues — RDDA mechanism:** Revenues that are recognized for  
1378 regulatory book purposes under the RDDA mechanism — representing the shortfall  
1379 between the full delivery revenue requirement and the revenues actually collected at the  
1380 levelized Capacity Charge — are deducted in the taxable income bridge. Although these  
1381 deferred revenues are accrued as a regulatory asset on the book balance sheet, they have

1382 not been received in cash from the ratepayer and are not yet fixed or determinable for  
1383 federal income tax purposes. Accordingly, these amounts are excluded from taxable  
1384 income in the period of book accrual and will be recognized as taxable income in the  
1385 future periods when the RDDA balance is drawn down and the corresponding revenues  
1386 are actually collected from the customer. The deferred revenue temporary difference  
1387 arising from this treatment is reflected in the deferred tax computation described in  
1388 Section Section X.iii of this testimony.

1389 d) **Add back expenses not recovered from ratepayers:** Expenses that are not included in  
1390 approved rates — and are therefore not recovered from the ratepayer — are added back  
1391 to arrive at taxable income. The rationale for this add-back is a fundamental principle of  
1392 utility tax accounting: the income tax allowance included in the delivery revenue  
1393 requirement is designed to compensate UCDEU only for the tax cost associated with  
1394 revenues collected from, and expenses charged to, ratepayers. Where an expense is not  
1395 included in approved rates and is not recovered through the revenue requirement, the  
1396 corresponding tax deduction does not reduce taxable income for purposes of the revenue  
1397 requirement calculation. Including the tax benefit of a non-rate-recovered expense in the  
1398 revenue requirement would effectively transfer that benefit to ratepayers who did not bear  
1399 the underlying cost, which would be inconsistent with the matching principle  
1400 underpinning the normalized tax method. By adding these expenses back in the taxable  
1401 income bridge, the model ensures that the income tax allowance in the delivery revenue  
1402 requirement reflects only the tax cost associated with rate-recovered costs and rate-  
1403 collected revenues.

1404 e) **Deduct business interest expense — subject to Internal Revenue Code (IRC) §163(j)**

1405 **cap:** Business interest expense is deducted from taxable income, subject to the 30% of

1406 Adjusted Taxable Income (ATI) limitation under Internal Revenue Code (IRC) §163(j).

1407 Any interest expense disallowed in the current year is carried forward as a Deferred Tax

1408 Asset (DTA) and utilized in future years when ATI is sufficient, as described in Section

1409 X.iii of this testimony.

1410 f) **Deduct State income tax:** They are deducted in computing federal taxable income as per

1411 Internal Revenue Code (IRC) §164.

1412 g) **Deduct Tax Loss carryforwards:** Available tax loss carried forward are applied to

1413 reduce taxable income, subject to the 80% taxable income limit applicable to post-2017

1414 Tax losses.

1415 h) **Add back equity component of AFUDC:** The equity component of AFUDC,

1416 recognized as book income during the construction period, is added back because it is not

1417 taxable at the time of accrual. This item is addressed in Section X.iv of this testimony as

1418 a permanent difference.

1419 The resulting federal taxable income is multiplied by the 21% federal corporate income tax rate

1420 to produce the current federal income tax payable for each forecast year.

1421 **Q. Does UCDEU expect to generate Net Operating Losses in the early years of**  
1422 **operation?**

1423 A. Yes. As a startup utility commencing operations in 2026 with significant upfront capital

1424 investment and a customer base in the initial build-out phase, UCDEU is expected to

1425 generate federal tax losses in the early years of the forecast period. These tax losses arise

1426 because MACRS accelerated tax depreciation deductions in the early years of asset life

1427 exceed book depreciation, and because revenues during the early build-out phase are not  
1428 yet sufficient to absorb all deductible costs. Tax loss carryforwards generated after 2017  
1429 may be carried forward indefinitely but are limited to offsetting 80% of taxable income in  
1430 any carryforward year under the Tax Cuts and Jobs Act of 2017.

1431 **ii. Payable Utah State Income Tax and High-Cost Infrastructure Tax Credit**  
1432 **(HCITC)**

1433 **Q. How is the current Utah state income tax payable calculated in the GRC Financial**  
1434 **Model?**

1435 A. The current Utah state income tax payable is reported in Schedules 15 of GRC  
1436 Application, Attachment 1, Appendix A. The Utah taxable income base follows a similar  
1437 structure to the federal computation described in Section X.i, subject to Utah-specific  
1438 conformity rules. The GRC Financial Model applies a 4.5% Utah state corporate income  
1439 tax rate to the taxable income to produce the gross current state income tax liability for  
1440 each forecast year.

1441 **Q. How is the Utah High-Cost Infrastructure Tax Credit (HCITC) reflected in the state**  
1442 **income tax calculation?**

1443 A. The HCITC supports significant infrastructure investments in the state. Qualifying  
1444 infrastructure investment that is certified by the Utah Office of Energy Development  
1445 ("OED") and approved by the Utah Energy Infrastructure Authority ("UEIA") Board will  
1446 generally receive a non-refundable tax credit of 30% of qualifying infrastructure-related  
1447 state revenue generated during a qualifying tax period. The total tax credit authorized for  
1448 a project will be 50% of the cost of the infrastructure investment. As a district energy

1449 utility making substantial infrastructure investments in Utah City, UCDEU is a qualifying  
1450 entity for the HCITC, subject to OED certification and UEIA Board approval.

1451 The HCITC is computed in the HCITC Fcst tab of the GRC Financial Model  
1452 (Highly Confidential Exhibit 7.1), reducing the payable state income tax in the year the  
1453 credit is utilized. To the extent that the annual HCITC credit exceeds UCDEU's Utah  
1454 state income tax liability in a given year, the excess is carried forward for up to seven  
1455 years.

1456 **iii. Deferred Income Tax — Temporary Differences**

1457 **Q. What are temporary differences and how do they arise in the GRC Financial**  
1458 **Model?**

1459 A. Temporary differences arise when the timing of income or expense recognition for  
1460 regulatory book purposes differs from their recognition for income tax purposes. These  
1461 differences are temporary because they reverse over time — what is recognized earlier  
1462 for tax purposes will be recognized later for book purposes, or vice versa. The tax effect  
1463 of temporary differences is recorded as Deferred Tax Assets ("DTAs") or Deferred Tax  
1464 Liabilities ("DTLs") in the GRC Financial Model.

1465 A Deferred Tax Liability (DTL) arises when tax deductions are taken earlier than the  
1466 corresponding book expense — meaning UCDEU pays less tax today but will owe more  
1467 in the future. A Deferred Tax Asset (DTA) arises when book deductions precede tax  
1468 deductions — meaning UCDEU pays more tax today but will benefit from a future  
1469 deduction.

1470 The GRC Financial Model identifies three categories of temporary differences for  
1471 UCDEU:

1472 **(a) Tax Accelerated Depreciation — MACRS vs. Straight-Line Book**

1473 **Depreciation**

1474 **Q. How does MACRS depreciation create a temporary difference in the GRC Financial**  
1475 **Model?**

1476 A. For income tax purposes, the GRC Financial Model applies the Modified Accelerated  
1477 Cost Recovery System ("MACRS") to eligible Plant in Service, as prescribed under the  
1478 Internal Revenue Code (IRC). MACRS assigns each asset category to a prescribed  
1479 recovery period and applies accelerated depreciation methods, resulting in larger tax  
1480 depreciation deductions in the early years of an asset's life compared to the straight-line  
1481 book depreciation used for regulatory purposes.

1482 Because MACRS front-loads tax depreciation deductions relative to book  
1483 depreciation, UCDEU's taxable income is lower than book income in the early years of  
1484 each asset's life — creating a **DTL** (a future tax obligation). As assets age and MACRS  
1485 depreciation fall below book depreciation in later years, the DTL begins to reverse,  
1486 increasing taxable income relative to book income.

1487 **Q. Does the GRC Financial Model apply bonus depreciation under IRC §168(k)?**

1488 A. No. The GRC Financial Model's General Inputs tab reflects that bonus depreciation is set  
1489 to "Off" as a deliberate modeling decision. UCDEU has elected not to claim the  
1490 additional first-year depreciation allowance under IRC §168(k) for any eligible asset  
1491 class placed in service during the forecast period. This election is both permissible and  
1492 strategically appropriate for UCDEU ratepayers for the following reasons:

- 1493 1. **Smaller RDDA balance and lower total cost to ratepayers:** A smaller RDDA balance  
1494 means lower accumulated carrying charges, a shorter recovery timeline, and a lower total  
1495 cost to ratepayers over the life of the rate stabilization period.
- 1496 2. **Tax losses limitation reduces the near-term tax value of bonus depreciation:** As a  
1497 startup utility with limited early-year taxable income, UCDEU would generate substantial  
1498 Tax Losses if bonus depreciation were applied. Tax Losses generated after 2017 are  
1499 limited to 80% of taxable income in any carryforward year, reducing the present value  
1500 benefit of bonus depreciation for a startup utility with growing but initially modest  
1501 revenues.
- 1502 3. **HCITC utilization is protected:** UCDEU is eligible for the Utah High-Cost  
1503 Infrastructure Tax Credit ("HCITC"), a nonrefundable credit applied against Utah state  
1504 income tax liability. If bonus depreciation generated large Tax Losses, UCDEU would  
1505 have no Utah taxable income against which to apply the HCITC, forcing the credit into  
1506 carryforward for up to seven years and reducing its present value. By maintaining a more  
1507 moderate tax depreciation profile, taxable income is sufficient to absorb the HCITC  
1508 credit in earlier periods, maximizing its benefit to ratepayers.

1509 **(b) Deferred Revenues — Capacity Charge Levelization and the RDDA**

1510 **Mechanism**

1511 **Q. How do deferred revenues give rise to a temporary difference in the GRC Financial**  
1512 **Model?**

1513 A. A second source of temporary differences arises from the treatment of deferred revenues  
1514 associated with the levelization of the Capacity Charge and the RDDA mechanism. For  
1515 regulatory book purposes, revenues that are deferred into the RDDA — representing the

1516           shortfall between the delivery revenue requirement and the revenues collected at the  
1517           levelized Capacity Charge — are recognized as a regulatory asset on the regulatory  
1518           balance sheet but are not recognized as taxable revenue until collected. For tax purposes,  
1519           revenues are generally recognized when received or when the right to receive them is  
1520           fixed and determinable, which does not coincide with the regulatory book accrual of  
1521           RDDA deferred revenues.

1522                     This timing difference between book and tax revenue recognition creates a **DTA**  
1523           in the early years of the RDDA build-up phase — UCDEU's book income reflects the full  
1524           revenue requirement including the RDDA accrual, while taxable income excludes the  
1525           deferred portion not yet collected. As the RDDA balance is drawn down and the deferred  
1526           revenues are collected in cash through rates in future periods, the DTA reverses and  
1527           taxable income increases accordingly.

1528                     **(c) Business Interest Expense Deductibility Cap — Internal Revenue Code**  
1529                             **§163(j)**

1530   **Q.   How does the Internal Revenue Code (IRC) §163(j) interest deductibility cap give**  
1531   **rise to a temporary difference in the GRC Financial Model?**

1532   **A.**   The GRC Financial Model reflects the business interest expense limitation under IRC  
1533   §163(j), which restricts the deductibility of business interest expense to 30% of a  
1534   taxpayer's Adjusted Taxable Income ("ATI") in a given taxable year. When UCDEU's  
1535   current-year interest expense exceeds that cap, the disallowed portion is not deductible in  
1536   the current period; instead, it is carried forward to future tax years. This carry forward is  
1537   recorded as a Deferred Tax Asset ("DTA") in the model, representing a future tax benefit

1538 that will be realized when the carry forward is utilized in a year in which Adjusted  
1539 Taxable Income (ATI) is sufficient to absorb the previously disallowed expense.

1540 UCDEU does not qualify for the regulated public utility exception to Internal  
1541 Revenue Code (IRC) §163(j) under §168(i)(10) because the utility provides thermal  
1542 energy service through a district energy system, which does not fall within the  
1543 enumerated categories of property to which that exception applies. Accordingly, the  
1544 §163(j) limitation applies to UCDEU in full, and the model's treatment reflects that  
1545 position consistently.

1546 For tax years beginning after December 31, 2024, the One Big Beautiful Bill Act  
1547 ("OBBBA") restores the ATI computation to an EBITDA basis — adding back  
1548 depreciation and amortization — which increases the effective cap amount and allows a  
1549 greater portion of UCDEU's interest expense to be deducted in any given year. This  
1550 change is reflected in the GRC Financial Model for the applicable test period years and  
1551 reduces, but does not eliminate, the magnitude of §163(j) carry forwards projected in the  
1552 forecast.

1553 The model's treatment of §163(j) carry forwards ensures that disallowed interest  
1554 expense is not permanently excluded from the tax computation but is instead matched to  
1555 the period in which the corresponding tax benefit is expected to be realized, consistent  
1556 with the deferred tax accounting principles applicable to regulated utilities.

1557 **(d) Net Operating Losses**

1558 **Q. Please explain how Net Operating Losses are reflected in the GRC Financial Model?**

1559 A. The federal income tax reflects the use of Net Operating Losses (“NOLs”) in computing  
1560 current federal income tax expense, consistent with normalization requirements. While

1561 NOLs may reduce federal income taxes payable in a given period, they represent a  
1562 temporary difference rather than a permanent reduction in tax expense. Accordingly, the  
1563 tax allowance includes both (1) a reduction to current federal income tax expense from  
1564 NOL utilization and (2) the establishment or reversal of deferred income taxes associated  
1565 with those NOLs.

1566 **Q. Why does the use of Net Operating Losses give rise to a temporary difference rather**  
1567 **than a permanent difference?**

1568 A. NOLs arise when tax-deductible expenses exceed taxable revenues in a given period.  
1569 Under federal tax law, those losses may be carried forward and used to offset taxable  
1570 income in future years. As a result, NOLs defer the payment of federal income taxes to  
1571 future periods rather than permanently eliminating them. This timing difference between  
1572 when income and expenses are recognized for ratemaking purposes versus when they  
1573 affect taxable income creates a temporary difference that must be normalized for  
1574 ratemaking purposes.

1575 **Q. How are these NOL-related temporary differences treated under normalization**  
1576 **principles?**

1577 A. Under normalization, the tax effects of temporary differences are recognized over the  
1578 period in which the underlying differences reverse. When NOLs are generated, the  
1579 Company records a deferred tax asset reflecting future tax benefits associated with the  
1580 carryforward of those losses. When the NOLs are later utilized to offset taxable income,  
1581 that deferred tax asset is reversed. The tax allowance in this GRC reflects both the current  
1582 tax impact of NOL utilization and the appropriate deferred tax entries to ensure that  
1583 customers neither overpay nor underpay income taxes over time.

1584 **Q. Is UCDEU’s treatment of NOL-related tax effects consistent with regulatory and**  
1585 **accounting standards?**

1586 A. Yes. The Company’s treatment of NOL-related temporary differences is consistent with  
1587 federal normalization requirements, generally accepted accounting principles, and long-  
1588 standing regulatory practice. The approach ensures that income tax expense included in  
1589 rates reflects both current and deferred federal income tax impacts, providing a fair,  
1590 accurate, and symmetric treatment of tax costs for customers across time.

1591 **iv. Tax Allowance Included in the Delivery Revenue Requirement**

1592 **Q. How is the income tax allowance included in the delivery revenue requirement**  
1593 **calculated?**

1594 A. The income tax allowance included in the delivery revenue requirement represents the  
1595 total regulatory income tax cost that UCDEU is entitled to recover from its customers in  
1596 each forecast year. It is calculated in the GRC Financial Model as follows:

1597 Tax Allowance = Current Payable Federal Income Tax + Current Payable State Income  
1598 Tax (net of utilized HCITC) + Increase in Deferred Tax Liabilities (DTL) – Increase in  
1599 Deferred Tax Assets (DTA)

1600 This formulation ensures that the tax component of the revenue requirement  
1601 reflects both the cash taxes payable in the current period and the net change in deferred  
1602 tax balances attributable to regulatory temporary differences. Including the change in  
1603 deferred taxes ensures that ratepayers are charged on a normalized basis — consistent  
1604 with standard utility ratemaking practice under the normalized tax method — rather than  
1605 on a flow-through basis that would produce volatile year-to-year tax expense.

1606                   When DTLs increase (i.e., book income exceeds taxable income due to  
1607                   accelerated MACRS tax depreciation), the tax allowance includes an amount above  
1608                   current cash taxes payable, building up the ADIT balance that is returned to ratepayers  
1609                   through a rate base reduction in future periods. When DTAs increase (i.e., taxable income  
1610                   exceeds book income, such as during the RDDA revenue deferral period or when §163(j)  
1611                   carryforwards accumulate), the tax allowance is reduced below cash taxes payable,  
1612                   reflecting the future tax benefit that ratepayers will receive when the DTA reverses.

1613                   **v.   Permanent Differences — Equity Portion of AFUDC**

1614                   **Q.   Why is the equity component of AFUDC treated as a permanent difference?**

1615                   A.   During the construction period, UCDEU accrues AFUDC on eligible CWIP balances.  
1616                   AFUDC comprises two components: a debt component and an equity component. The  
1617                   equity component of AFUDC is recognized as book income during the construction  
1618                   period, increasing regulatory book net income in the years the asset is under construction.  
1619                   However, the equity component of AFUDC is not taxable when accrued — it is  
1620                   permanently excluded from taxable income at the time of accrual and is instead recovered  
1621                   through the depreciation deductions taken on the capitalized AFUDC amount embedded  
1622                   in the cost of the Plant in Service once the asset is placed in service.

1623                   This creates a permanent difference: the equity AFUDC income recognized for  
1624                   book purposes in the construction period has no corresponding taxable income in that  
1625                   period, and the difference does not reverse in the same way a temporary difference does.  
1626                   Rather, the tax recovery occurs through MACRS depreciation on the full capitalized cost  
1627                   of the asset — including the equity AFUDC component — over the applicable MACRS  
1628                   recovery period. Because the equity AFUDC income is permanently excluded from

1629 taxable income at the time of accrual, it is added back in the taxable income bridge and is  
1630 not tracked in the income tax schedule.

1631 **XI. DELIVERY REVENUE REQUIREMENT**

1632 **Q. What is the purpose of this section of your testimony?**

1633 A. The purpose of this section is to present the delivery revenue requirement for UCDEU as  
1634 calculated in the GRC Financial Model (Corix Exhibit 7.1) and to explain how its  
1635 components combine to produce the total amount that UCDEU is entitled to recover  
1636 through its Capacity Charge. Specifically, this section: (1) summarizes the revenue  
1637 requirement build-up across all cost components; (2) explains the separation between the  
1638 delivery revenue requirement and the energy supply revenue requirement; (3) describes  
1639 the ECRA forecasting and accounting assumptions embedded in the financial model; and  
1640 (4) explains how the Revenue Deficiency Deferral Account ("RDDA") links to the  
1641 delivery revenue requirement during UCDEU's startup and growth period. The regulatory  
1642 framework governing the RDDA mechanism, the ECRA, and the rate design are  
1643 addressed in the testimony of Douglas Chong (Corix Exhibit 3.0); my testimony is  
1644 limited to the financial model derivation, structure, and quantification of the delivery  
1645 revenue requirement.

1646 ***A. Revenue Requirement Build-Up — All Components***

1647 **Q. How is the delivery revenue requirement structured in the GRC Financial Model?**

1648 A. The delivery revenue requirement is calculated in the GRC Financial Model using the  
1649 standard utility cost-of-service framework. The revenue requirement is the sum of all  
1650 prudently incurred costs necessary for UCDEU to provide regulated thermal delivery

1651 service, plus an authorized return on invested capital. It is presented in Schedules 1 and 2  
1652 of GRC Application, Attachment 1, Appendix A.

1653 **Q. What are the components of the delivery revenue requirement?**

1654 A. The delivery revenue requirement is composed of the following components, each of  
1655 which is addressed in detail in the referenced sections of this testimony:

1656 **GRUESO-BARON TABLE 9**

<b>Line</b>	<b>Component</b>	<b>Description</b>	<b>Section Reference</b>
1	Operating & Maintenance Expense	Direct labor, maintenance, insurance, allocations, and other O&M	Section VIII
2	Depreciation & Amortization	Straight-line book depreciation on Plant in Service	Section VI
3	Taxes Other Than Income Tax	Property tax, franchise fee, and PURF fee	Section X.A
4	Income Tax Allowance	Normalized income tax expense (current payable + change in deferred taxes)	Section X.B
5	Return on Rate Base — Debt	Interest expense on the 50% debt component of rate base	Section IX
6	Return on Rate Base — Equity	Authorized ROE (10.50%) on the 50% equity component of rate base	Section IX
7	<b>Total Delivery Revenue Requirement</b>	Sum of Lines 1 through 6	Schedule 1, Schedule 2

1657 Each component is calculated in the relevant forecast tabs of the GRC Financial  
1658 Model and flows into Schedule 2 and Schedule 1 as view-only outputs.

1659

1660

1661 **Q. What is the total delivery revenue requirement for the test year?**

1662 A. The total delivery revenue requirement for the test year (August 1, 2026, through July 31,  
1663 2027), as calculated in the GRC Financial Model, is \$4,639,486. This represents the full  
1664 cost of regulated thermal delivery service — including operating expenses, depreciation,  
1665 taxes, and the authorized return on rate base — that UCDEU is entitled to recover during  
1666 the test period. The delivery revenue requirement compares to billed revenues at  
1667 proposed rates of \$1,126,119 for the test year, resulting in \$3,513,368 of annual revenue  
1668 deficiency that is deferred into the RDDA, as described in Section XI.D of this testimony.

1669 ***B. Separation of Energy Supply vs. Delivery Revenue Requirement***

1670 **Q. How is the total UCDEU revenue requirement divided between delivery and energy**  
1671 **supply?**

1672 A. The total UCDEU revenue requirement is divided into two distinct and separately  
1673 recoverable components:

- 1674 • The Delivery Revenue Requirement, which covers all costs associated with owning,  
1675 operating, and maintaining the distribution infrastructure and central energy facilities —  
1676 including rate base return, O&M, depreciation, and taxes. The delivery revenue  
1677 requirement is recovered through the Capacity Charge, a fixed monthly charge measured  
1678 in \$/kilowatts (\$/kW).
- 1679 • The Energy Supply Revenue Requirement, which covers the variable costs of purchased  
1680 thermal energy inputs — electricity, natural gas, water and wastewater, and chemicals —  
1681 required to produce and deliver heating and cooling to customers. The energy supply  
1682 revenue requirement is recovered through the Energy Charge, a variable monthly charge  
1683 measured in \$/kilowatt-hours (\$/kWh).

1684           The Capacity Charge revenues recover the delivery revenue requirement. The  
1685           Energy Charge revenues recover the energy supply revenue requirement. This two-part  
1686           structure ensures that fixed infrastructure costs and variable energy supply costs are  
1687           recovered through appropriately matched charge components, consistent with the nature  
1688           of each cost category.

1689   **Q.   Why are energy supply costs separated from the delivery revenue requirement?**

1690   A.   The proposed regulatory framework for energy supply costs decouples the energy supply  
1691           costs from test year ratemaking. The energy supply costs are variable costs directly  
1692           related to the production of thermal energy service for both heating and cooling. If  
1693           customers have higher thermal consumption the energy supply costs increase. If the  
1694           customers have lower thermal consumption the energy supply costs decrease. They are  
1695           directly correlated with each other. Given the linkage between actual consumption and  
1696           actual energy supply costs, it would be practical and reasonable to unbundle these costs  
1697           from the delivery revenue requirement and also decouple the recovery of these energy  
1698           supply costs and consider them as pass-through costs. The financial model implements  
1699           this separation by maintaining two distinct models: the GRC Financial Model (Highly  
1700           Confidential Corix Exhibit 7.1) for the delivery revenue requirement and Capacity  
1701           Charge, and the ECRA Financial Model (Highly Confidential Corix Exhibit 7.2) for the  
1702           energy supply revenue requirement and Energy Charge.

1703   **Q.   What is the energy supply revenue requirement for the test year?**

1704   A.   As described in Section V of this testimony, the total energy supply revenue requirement  
1705           for the test year is \$268,663, consisting of electricity costs; natural gas costs; water and  
1706           sewer costs; chemicals, safety, and testing costs as derived from the ECRA Financial

1707 Model (Highly Confidential Corix Exhibit 7.2). The proposed Energy Charge for the test  
1708 year is \$0.0417 per kWh of thermal energy delivered, as described in Section V.

1709 ***C. ECRA Forecasting and Accounting Assumptions***

1710 **Q. What is the ECRA and how is it reflected in the financial models?**

1711 A. The Energy Cost Reconciliation Account ("ECRA") is a deferral account that captures  
1712 the cumulative actual costs of energy supply and the cumulative actual energy charge  
1713 revenues received. The ECRA is the balancing account to ensure on a dollar-for-dollar  
1714 basis that the actual purchased thermal energy supply costs are recovered in the actual  
1715 Energy Charge revenues. Because energy supply costs are pass-through costs subject to  
1716 the ECRA, they are not included in the delivery revenue requirement computed in the  
1717 GRC Financial Model and are not recovered through the Capacity Charge.

1718 **Q. How is the ECRA forecast modeled in the financial models?**

1719 A. The ECRA forecast is modeled in the ECRA Financial Model, which is a separate model  
1720 from the GRC Financial Model. The ECRA Financial Model establishes the test year  
1721 energy supply cost forecast — using unit commodity costs applied to forecast thermal  
1722 energy volumes — and derives the proposed Energy Charge for the test period. The key  
1723 modeling assumptions underlying the ECRA forecast, including the energy use intensity  
1724 assumptions, occupancy ramp-up adjustments, and commodity price inputs, are described  
1725 in Sections IV and V of this testimony. In the GRC Financial Model, the ECRA balance  
1726 is tracked as a non-rate-base deferral account in Schedule 10 of GRC Application,  
1727 Attachment 1, Appendix A.

1728

1729

1730 **Q. When will the ECRA first be cleared after the initial test year rates are established?**

1731 A. Corix proposes that the Energy Charge be amended on an annual basis when the utility  
1732 files a pass-through application with the forecast for the upcoming energy supply costs,  
1733 targeting clearing the ECRA balance in the filing's 12-month energy supply test period.  
1734 Corix proposes to file the pass-through by November 1, 2027, for rates effective January  
1735 1, 2028. This means the Energy Charge rates established initially for August 1, 2026,  
1736 would be applicable from that date to December 31, 2027. When the rates are changed  
1737 for January 1, 2028, UCDEU will be aligned with the beginning of the calendar year rate  
1738 changes.

1739 ***D. RDDA Linkage to the Delivery Revenue Requirement***

1740 **Q. How does the RDDA arise from the delivery revenue requirement?**

1741 A. The Revenue Deficiency Deferral Account ("RDDA") arises because the delivery  
1742 revenue requirement — which reflects the full cost of service including a return on the  
1743 rate base of assets placed in service — exceeds the revenues collectable from customers  
1744 at the approved levelized Capacity Charge rate during UCDEU's startup and growth  
1745 period. UCDEU is a greenfield utility with a single customer whose premises are  
1746 connected progressively over a multi-year build-out. As a result, in the early years, the  
1747 rate base and associated revenue requirement are large relative to the limited customer  
1748 load on the system, and the levelized Capacity Charge established to protect ratepayers  
1749 from rate shock does not fully recover the annual revenue requirement. The annual  
1750 revenue deficiency — the excess of the delivery revenue requirement over billed  
1751 revenues at the levelized Capacity Charge — is deferred into the RDDA rather than being

1752 recovered immediately and is collected from the customer in future periods as the system  
1753 grows and revenues increase.

1754 **Q. How is the relationship between the delivery revenue requirement, billed revenues,**  
1755 **and the RDDA reflected in the GRC Financial Model?**

1756 A. Schedule 1 of GRC Application, Attachment 1, Appendix A presents the high-level  
1757 summary of the delivery revenue requirement, revenue at proposed rates, the resulting  
1758 shortfall or surplus, and the RDDA deferral roll-forward. The relationship is captured as  
1759 follows in each forecast year:

1760 **Revenue Deficiency (Surplus) = Delivery Revenue Requirement – Billed Revenues**  
1761 **at Levelized Capacity Charge**

1762 For the test year, this relationship produces a revenue deficiency of  
1763 \$3,513,368 (\$4,639,486 delivery revenue requirement less \$1,126,119 billed revenues),  
1764 which is posted to the RDDA as an addition to the opening balance. Because the RDDA  
1765 is a rate base item, it earns a carrying charge at the authorized weighted average cost of  
1766 capital. This carrying charge is included in the revenue requirement and accumulates in  
1767 the RDDA balance until it is recovered from customers. Schedule 9 of GRC Application,  
1768 Attachment 1, Appendix A presents the RDDA roll-forward, including the opening  
1769 balance, annual additions reflecting the revenue shortfall, and the ending RDDA balance  
1770 by forecast year.

1771 **Q. When is the RDDA balance projected to be fully recovered?**

1772 A. The RDDA balance is projected to be fully recovered by 2041, as presented in Schedule 9  
1773 and Schedule 1 of GRC Application, Attachment 1, Appendix A. The RDDA balance  
1774 builds progressively from \$996,786 at the end of 2026 through a peak of \$34,093,158 in

1775 2034, as capital additions place significant assets in service ahead of the full customer  
1776 build-out. Beginning in 2035, as the Utah City development continues to mature and  
1777 connected load approaches full build-out capacity, billed revenues begin to exceed the  
1778 annual delivery revenue requirement, generating annual surpluses that draw down the  
1779 accumulated RDDA balance. By 2041, the RDDA balance is fully extinguished. The  
1780 regulatory framework governing the RDDA recovery timeline, carrying charge formula,  
1781 and amortization schedule is addressed in the testimony of Douglas Chong (Corix Exhibit  
1782 3.0); this testimony is limited to confirming how the RDDA balance, carrying charge, and  
1783 recovery are reflected in the GRC Financial Model.

1784 **Q. How does the RDDA balance affect the delivery revenue requirement in future**  
1785 **years?**

1786 A. The RDDA balance included in rate base earns a carrying charge at the authorized  
1787 WACC. This carrying charge is itself a component of the delivery revenue requirement in  
1788 each year — it increases the revenue requirement in the years when the RDDA is  
1789 building up, reflecting the cost of deferring revenue recovery to future periods. As the  
1790 RDDA balance is drawn down in later years when revenues exceed the revenue  
1791 requirement, the carrying charge component of the revenue requirement declines.

1792 **XII. CONCLUSION**

1793 **Q. Please summarize your testimony.**

1794 A. In this testimony I have addressed the financial modeling basis for the revenue  
1795 requirement and rate design of the UCDEU in connection with this GRC Application  
1796 filed in Docket No. 26-2666-01. Specifically, I have addressed the following matters:

- 1797       • Financial Models. I described the purpose, architecture, and modeling conventions of the  
1798       UCDEU GRC Financial Model and the UCDEU ECRA Financial Model, including their  
1799       input tabs, forecast engine tabs, and output schedule tabs; the linkage between the two  
1800       models; and their relationship to the testimony of other witnesses in this proceeding.
- 1801       • Customer Forecast, Peak Load, and Energy Demand. I described the Utah City  
1802       development project, the buildout schedule, the customer (Flagborough), the  
1803       undiversified and diversified peak load methodology, the energy use intensity  
1804       assumptions by building typology, and the resulting annual energy demand forecast. For  
1805       the test year, diversified peak demands are 2.9 MW for heating and 1.9 MW for cooling,  
1806       with total annual energy demand of 6,442.76 MWh.
- 1807       • Energy Supply Costs and Energy Supply Revenue Requirement. I described the energy  
1808       supply cost components and the derivation of the total test year energy supply revenue  
1809       requirement which supports the proposed Energy Charge of \$0.0417 per kWh. I also  
1810       described the ECRA mechanism for decoupled, pass-through recovery of actual energy  
1811       supply costs.
- 1812       • Capital Expenditures, Plant in Service, CIAC, and Depreciation. I described the capital  
1813       expenditure program by asset category, the in-service timing methodology, the treatment  
1814       of Contributions in Aid of Construction, and the straight-line depreciation methodology  
1815       applied to regulated book assets. Total capital additions for the test period are  
1816       \$31,789,958, comprising Production assets of \$21,797,971 and Distribution assets of  
1817       \$9,909,538 and General Plant assets of \$82,449.
- 1818       • Rate Base and Rate Base Methodology. I explained the components of rate base, the mid-  
1819       year averaging convention applied for years 2027 and beyond, and the startup year

1820 weighted average methodology applied for 2026 reflecting the actual in-service timing of  
1821 Phase 1 assets. I also described the treatment of the RDDA as a rate base item earning a  
1822 carrying charge at the authorized WACC.

1823 • Operating Expenses and Working Capital. I described the operating and maintenance  
1824 expense categories included in the delivery revenue requirement — including direct  
1825 labor, maintenance, insurance, allocations of Regional and Corporate services costs, and  
1826 other O&M — and the working capital methodology.

1827 • Cost of Capital. I described the capital structure (50% debt / 50% equity), the authorized  
1828 ROE of 10.50%, the cost of debt of 7.49%, the AFUDC methodology, and the resulting  
1829 WACC of 8.995%, consistent with the cost of capital inputs established by Maxwell  
1830 Wang (Corix Exhibit 4.0) and Josh Figueroa of The Brattle Group (Corix Exhibit 5.0).

1831 • Taxes. I described all taxes reflected in the GRC Financial Model, including the  
1832 combined statutory income tax rate of 25.5% (21.0% federal and 4.5% Utah state), the  
1833 election out of bonus depreciation under Internal Revenue Code (IRC) §168(k), the Utah  
1834 High-Cost Infrastructure Tax Credit ("HCITC"), the Internal Revenue Code (IRC)  
1835 §163(j) interest limitation, and the treatment of Accumulated Deferred Income Taxes  
1836 ("ADIT") as a reduction to rate base.

1837 • Delivery Revenue Requirement and RDDA. I presented the total delivery revenue  
1838 requirement for the test year of \$4,639,539, explained the separation of the delivery and  
1839 energy supply revenue requirements, and described the linkage between the delivery  
1840 revenue requirement, billed revenues of \$1,126,119, and the resulting annual revenue  
1841 deficiency of \$3,513,420 posted to the RDDA. I confirmed that the RDDA balance is  
1842 projected to peak at \$34,093,307 in 2034 and to be fully recovered by 2041.

1843 **Q. What actions do you recommend the PSC take in connection with your testimony?**

1844 A. Based on my testimony and the outputs of the GRC Financial Model and the ECRA  
1845 Financial Model, as well as the remainder of the testimony and exhibits submitted by  
1846 Corix in this docket, I recommend that the PSC approve the following:

- 1847 1. The test year delivery revenue requirement of \$4,639,486 as the basis for the proposed  
1848 Capacity Charge, as presented in Schedule 1 and Schedule 2 of GRC Application,  
1849 Attachment 1, Appendix A.
- 1850 2. The test year energy supply revenue requirement of \$268,218 and the proposed Energy  
1851 Charge of \$0.0417 per kWh, as presented in the ECRA Financial Model and Schedule 14  
1852 of GRC Application, Attachment 1, Appendix A.
- 1853 3. The RDDA mechanism as a rate base item earning a carrying charge at the authorized  
1854 WACC, with the RDDA balance projected to be fully recovered by 2041, as presented in  
1855 Schedule 9 and Schedule 1 of GRC Application, Attachment 1, Appendix A.
- 1856 4. The ECRA mechanism for annual pass-through recovery of energy supply costs on a  
1857 decoupled basis, with the first pass-through filing targeted for November 1, 2027, for  
1858 rates effective January 1, 2028.
- 1859 5. Acceptance of the GRC Financial Model and the ECRA Financial Model as the  
1860 evidentiary basis for the revenue requirement, rate base, and rate design calculations  
1861 presented in this GRC Application.

1862 **Q. Does this conclude your testimony?**

1863 A. Yes.