

BRITISH COLUMBIA UTILITIES COMMISSION
IN THE MATTER OF THE UTILITIES COMMISSION ACT
R.S.B.C. 1996, CHAPTER 473

And

RE: Corix Multi-Utility Services Inc.
Application for a Certificate of Public Convenience and
Necessity for Additional Capital
and Amended Rates for UniverCity Neighbourhood Utility
Service on Burnaby Mountain

Vancouver, B.C.
December 16th, 2015

Streamlined Review Process

BEFORE:

R. Revel,

Commissioner/Panel Chair

VOLUME 1

APPEARANCES

P. MILLER	Commission Counsel
Ashita ANAND SANGHERA Todd SMITH Yolanda DOMINGO Sarah WALSH Hillary CHEUNG	Commission Staff
T. BRAITHWAITE	BCOAPO
W.J. ANDREWS Tom HACKNEY	B.C. Sustainable Energy Association and Sierra Club of British Columbia (BCSEA- SCBC)
Jesse GALICZ	Development Manager with SFU Community Trust
Ann TUCK	Counsel for Corix Multi-Utility Services Inc.
Travis HICKFORD-KULAK Ivana SAFAR Ian WIGINTON David LIESCH Robert DOYLE Shelley STRUTT Charlene ROWAN	Staff of Corix Multi-Utility Services Inc.

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CAARS

VANCOUVER, B.C.

November 16th, 2015

(PROCEEDINGS RESUMED AT 9:07 A.M.)

THE CHAIRPERSON: Well, thank you very much, Keith. The evidence and information you just provided, I suspect, is critical in many cases, so thank you for that.

Thanks very much, and good morning, ladies and gentlemen. Welcome. My name is Richard Revel, and I'm a Commissioner with the British Columbia Utilities Commission. I've been appointed by the Commission to address the Corix Multi Services Incorporated application for a Certificate of Public Convenience and Necessity for additional capital and for amended rates for the UniverCity neighbourhood utility service on Burnaby Mountain, filed on October the 7th, 2015.

Also with us today from the Commission is Ms. Ashita Anand Sanghera, the lead staff for this application, along with her fellow Commission staff: Todd Smith, Yolanda Domingo, Sarah Walsh, and Hillary Cheung. Mr. Paul Miller, to my right, of Boughton Law, is acting as Commission counsel for this proceeding. And Allwest Reporting Limited will be providing transcripts of the proceeding.

Today's SRP process will address the Corix

1 multi-service -- Multi-Utility Services Incorporated
2 application for a Certificate of Public Convenience
3 and Necessity under Section 45 of the *UCA* and for
4 additional capital and amended rates for the
5 UniverCity Neighbourhood Utility Service on Burnaby
6 Mountain under Sections 45, 56, 60, and 61 of the *UCA*
7 for revenue requirements, rate design and rates as
8 described in the draft Order.

9 In its application, Corix stressed that the
10 project relates only to the temporary natural gas
11 energy system that is a precursor to a permanent low
12 carbon energy system that will ultimately provide the
13 energy needs of the UniverCity community. The low
14 carbon energy system will be the subject of a future
15 CPCN application to the Commission.

16 G-173-15, issued on October the 23rd, 2015,
17 established a regulatory timetable involving a
18 proposed SRP and requested that interveners and
19 interested parties to provide comment on the proposed
20 streamlined process as outlined in the SRP guidelines,
21 at the time of intervener registration. Further,
22 interveners were also asked to specifically state the
23 nature of their interest in the application and
24 identify generally the nature of the issues that they
25 intend to pursue should they attend the SRP.

26 One intervener indicated in the positive

1 that they supported the SRP process for the hearing --
2 this application, and no interveners registered
3 opposition to that process.

4 **Proceeding Time 9:13 a.m. T2/3**

5 That, ladies and gentlemen, brings us to
6 the task in front of us today. This application is
7 being dealt with today in accordance with the policy
8 guidelines and procedures for the streamlined review
9 process as set out in Commission Order G-37-12.
10 Further, a letter summarizing the process was sent to
11 participants on December the 10th, 2015. Also in
12 accordance with that process, after my opening remarks
13 we will register appearances, followed by Corix giving
14 a brief overview of the application and approvals
15 sought. Questions of clarification may be asked
16 during the Corix presentation.

17 After Corix's presentation, other hearing
18 participants will have an opportunity to explain their
19 interests. Participants will then have the
20 opportunity to ask questions of Corix.

21 To assist Allwest Reporting in keeping the
22 transcript clear, I ask that all individuals identify
23 themselves for the record before asking a question or
24 making a comment. I also request, and suggest it that
25 it would help Allwest immensely, if we all recall our
26 elocution lessons of our youth and are both clear in

1 our presentations and speak audibly. The best
2 Socratic dialectic we can muster will greatly assist
3 us in providing a clear evidentiary record.

4 As an aside, and recognizing the fate of
5 Socrates, I guarantee that I will not require you to
6 drink a cup of poisoned hemlock if you speak the
7 truth.

8 At the conclusion of the question period,
9 assuming there are no outstanding undertakings, we
10 will take a short break followed by Corix making a
11 final submission on the application. The interveners
12 will then be invited to provide their final
13 submissions, followed by an opportunity for Corix to
14 reply.

15 The streamlined review process is a more
16 informal process than the standard regulatory written
17 or oral hearing. Parties have an opportunity to
18 explore issues of concern to them and Corix is
19 expected to address these issues in an open and
20 fulsome manner.

21 Before we proceed with the Corix
22 presentation, we will register appearances by going
23 around the table and briefly introducing ourselves and
24 our affiliation. I will initiate the process and then
25 we'll proceed around the table to my right.

26 My name is Richard Revel and I am a

1 Commissioner with the British Columbia Utilities
2 Commission.

3 MR. MILLER: Paul Miller, Commission Counsel, Boughton
4 Law Corporation.

5 MR. SMITH: Todd Smith with the Commission.

6 MS. ANANDSANGHERA: Ashita Anand Sanghera, Engineer with
7 the Commission.

8 MS. DOMINGO: Yolanda Domingo, Commission Staff.

9 MS. WALSH: Sarah Walsh, Commission Staff.

10 MS. CHEUNG: Hillary Cheung, Commission Staff.

11 MS. BRAITHWAITE: Tannis Braithwaite, Counsel for the
12 Residential Ratepayer Groups known collectively as
13 BCOAPO.

14 MR. ANDREWS: Bill Andrews, Counsel for the B.C.
15 Sustainable Energy Association and Sierra Club British
16 Columbia.

17 MR. HACKNEY: Tom Hackney, Case Manager for the B.C.
18 Sustainable Energy Association and the Sierra Club.

19 MR. GALICZ: Jesse Gallis, Development Manager with SFU
20 Community Trust.

21 MR. ROWAN: Charlene Rowan, Project Coordinator, Business
22 Development with Corix.

23 MS. STRUTT: Shelley Strutt, Divisional Controller with
24 Corix, Canadian Utilities.

25 MR. DOYLE: Robert Doyle, Chief Operating Officer, FEB
26 Energy Inc. I'm a consultant working for Corix.

1 MR. LIESCH: David Liesch, Vice President Corporate
2 Development with Corix.

3 MS. TUCK: Ann Tuck, in-house Counsel for Corix.

4 MR. WIGINTON: Ian Wiginton, Director Regulatory, Corix.

5 MS. SAFAR: Ivana Safar, Project Manager, Corix.

6 MR. HICKFORD-KULAK: Travis Hickford-Kulak, Director of
7 Energy Services with Corix Utilities.

8 THE CHAIRPERSON: Thank you very much for that and I'll
9 turn it over to Corix for their presentation.

10 **Proceeding Time 9:18 a.m. T04**

11 MS. TUCK: We'd like to start today with our
12 presentation. We'd like to review the project and
13 application, and the approval sought. And then next
14 we'd like to move to the Commission Staff advance
15 questions received yesterday, that we have prepared
16 responses to, and provided in paper form, and we'll
17 discuss those. At any time, if you have questions
18 during the presentation, we'd be guided by the
19 information that you seek from us, and we look forward
20 to providing you with information to support the
21 application.

22 I'll turn it over to Travis.

23 **PRESENTATION BY CORIX:**

24 MR. HICKFORD-KULAK: Thank you. We've prepared a brief
25 presentation to give everybody an understanding for
26 those of you that aren't familiar with the UniverCity

1 NUS project. And then we'll go in to the approvals
2 that we're seeking, and then the benefits that we
3 believe that the solution is going to provide,
4 ultimately, to the ratepayers.

5 The first slide that we've prepared is
6 regarding the UniverCity development. It is a
7 residential development adjacent to Simon Fraser
8 University, up on Burnaby Mountain. And we've brought
9 along Jesse Galicz from the SFU Community Trust, to
10 give you a bit of an overview on the actual UniverCity
11 development itself.

12 Jesse?

13 MR. GALICZ: Thanks, Travis. So, as Travis mentioned,
14 UniverCity development is adjacent to Simon Fraser
15 University on Burnaby Mountain.

16 The full build-out of the project will be
17 about four and a half thousand units, or about 10,000
18 people. We looked at the -- it's a little bit washed
19 out, but the master plan we have here -- our Phase 1
20 of the development is now complete. It is not
21 connected to the NEU. That started construction in
22 about 2000. Our zoning phase is Phase 3, Phase 4, and
23 our central neighbourhood -- the Phase 2 area will all
24 be mostly connected to the NEU except for the first
25 two buildings in our downtown, as we call it, our
26 commercial core area, which is the cornerstone and the

1 hub building.

2 So, collectively now we're at about 5,000
3 people. I'll let the experts talk about the progress
4 with the temporary plan, and what we're dealing with
5 today.

6 How Corix fits into our model, we're a
7 sustainable community, we're transit oriented,
8 walkable, with a storm water management system and we
9 have a green building requirement for energy use and
10 for water use. And the NEU helps us achieve our green
11 building agenda and our green building requirements.

12 MR. HICKFORD-KULAK: Thank you, Jesse.

13 So, as Jesse has mentioned, the NUS
14 currently services largely Phase 3 and 4 of the
15 residential development. An overview of the NUS, it
16 is a district energy utility. It is providing hot
17 water as the medium for the energy services, and it
18 will be ultimately connected to 21 residential
19 developments within UniverCity.

20 Build-out is anticipated to take place over
21 the next six years. At that time, the system as
22 envisioned today would be fully built out. The
23 system, at its full build-out is a nine and a half
24 megawatt system. It's currently being serviced by a
25 2.7 megawatt iner-temp energy centre that currently
26 resides in a parking lot located within the UniverCity

1 community.

2 We're here today to talk about the SRP
3 regarding the second phase, which would be the
4 replacement of the existing plant with an 8 megawatt
5 module that would be able to service the continuing
6 development happening at UniverCity. And the
7 permanent -- ultimately, the permanent facility would
8 be a low-carbon energy solution which has been pegged
9 as biomass, woody biomass. And it would be between
10 two and a half and three and a half megawatts, with 8
11 megawatts of natural gas boilers for peaking and back-
12 up.

13 We currently have about 1.8 kilometres
14 total in distribution piping, and at full build-out we
15 would have about two and a half. And as we mentioned,
16 there is 21 buildings. One of those buildings has two
17 service connections, so a total of 22 energy transfer
18 stations.

19 **Proceeding Time 9:22 a.m. T05**

20 This is a map of the UniverCity
21 development. As you can sort of see, because of the
22 sun there, over here in the parking lot we have the
23 temporary energy centre that's currently residing on
24 site, providing service, and all of the red piping
25 here that's depicted on the drawing is currently
26 installed and providing service to the six buildings

1 that are currently connected, which would be parcels
2 29, 28, 27, 23, 22, and 16.

3 Corix's role, we are a multi-utility
4 service provider. We've designed, built, financed,
5 own, and operate the NUS. It is a regulated DES
6 system under the Order issued on May, 2011, which
7 included the approval of the rate schedule, and we
8 currently are charging our tariff based on a split of
9 60 percent fixed and a 40 percent variable charge.

10 Today's hearing is regarding the recent
11 application made on October the 7th. Corix has applied
12 for the following approvals. We are seeking for the
13 approval of the construction and operations of the
14 expanded unit, being the 8 megawatt unit; an updated
15 rate base, the deemed capital structure following the
16 new guidelines; a return on equity following the
17 updated low-risk benchmark; an updated levelized rate
18 structure; as well as an updated deferral account.

19 Temporary energy centre. This is what
20 we're here today to talk about.

21 Currently we have a 2.7 megawatt input and
22 a 2.3 megawatt output facility. So the actual energy
23 that's provided into the system at its peak capacity
24 is 2.3 megawatts. It is a custom designed unit, built
25 and engineered by Corix. It was built off-site in a
26 40-foot shipping container and delivered to site as a

1 complete functional unit. It was put into operation
2 in late 2011, and it has been providing service from
3 that time until today. And it utilizes condensing
4 boiler technology.

5 On average, the net thermal efficiency of
6 the system that we're offering you today hovers in the
7 78 to 80 percent range. So that is the -- after you
8 take into account the skin loss of the boilers
9 themselves, all the thermal energy loss in the piping
10 systems and the energy transfer stations, the overall
11 efficiency of the system is approximately 78 to 80
12 percent, depending on the time of year.

13 Here is a small photograph of the actual
14 boiler plant installed, that currently resides on the
15 mountain. And we'll talk a little bit about the
16 proposed upgraded plant. It will, again, be a pre-
17 packaged engineered system that will be fully built
18 off-site, this time, in a larger shipping container,
19 53 feet in length. And it will be delivered to site
20 as a fully functioning unit. It will simply couple
21 into the existing infrastructure that Corix has
22 already built on site.

23 It will be of 8 megawatt capacity at its
24 full build-out. And under the current application, we
25 propose to stage it. We would build 6 megawatts now,
26 and we would couple in another 2 megawatts later on,

1 once the load had developed and matured a little bit
2 more. Again, it will be BCSA registered. And it will
3 remain classified as "unmanned status" due to the
4 heating surface area. So it will not require a full-
5 time operator.

6 The difference with this plant is, this
7 plant will utilize atmospheric boiler technology as
8 opposed to condensing boiler technology. They are
9 long-term, long-life pieces of equipment, and they
10 will ultimately be repurposed into the permanent
11 energy facility once that's built later on in a couple
12 of years.

13 We're expecting the efficiencies to
14 maintain, or even be better, than what we're currently
15 seeing, just based on using a more appropriately
16 selected piece of equipment.

17 **Proceeding Time 9:27 a.m. T6**

18 The benefits are -- obviously it's a more
19 cost-effective solution. Corix has done an analysis
20 to find out what was the most practical and cost-
21 effective solution. The 2.3 megawatt additional unit
22 under the original application is no longer sufficient
23 to service the load demand that has been growing up on
24 the university development. Again, increased capacity
25 and reliability. It'll allow us to continue to
26 connect all of our new customers that are coming up in

1 the near future, and again overall increase in the net
2 thermal efficiency performance of this unit in its
3 entirety.

4 This unit will also incorporate upgraded
5 and updated controls and monitoring systems. The
6 original plant was built as almost a first of its
7 kind, and Corix has learned a lot through the years in
8 building other facilities for other utilities that we
9 operate. We're proposing to have additional metering
10 and control devices within this container which would
11 allow us to remotely control this unit, allowing for a
12 more efficient operation, as opposed to sending
13 operators to site every time there is an issue with
14 something.

15 It'll also maintain almost the exact same
16 footprint that it's currently -- that the 40-foot
17 container is taking up on the mountain. There is
18 definitely a space issue within the parking lot
19 itself, and imposing another full 40-foot container
20 would more than likely be frowned upon by the SFU
21 Community Trust, as well as the campus.

22 Here's a picture of an upgraded plant.
23 This is a 53-foot containerized plant. This is
24 actually at the UniverCity MDES -- or sorry, the UBC
25 MDES, and it would be the exact same unit and it would
26 be built off-site and placed on-site to resume

1 service.

2 That's all we have. Thank you.

3 THE CHAIRPERSON: Thank you.

4 MS. TUCK: Thank you, Travis. If there are any questions
5 relating specifically to the presentation, please go
6 ahead.

7 MR. ANDREWS: Bill Andrews. I have a question about the
8 slide that's headed "9.5 Megawatts" and it's simply,
9 where do we get the 9.5 when it appears that what
10 you're proposing is an 8 megawatt system?

11 MR. HICKFORD-KULAK: The 9.5 is the fully built-out load
12 of the UniverCity development. So the 8 megawatt
13 plant that we're proposing to build is the natural gas
14 component to that overall 9.5 megawatts. The
15 remaining residual value would be made up with the low
16 carbon energy solution in the future.

17 MR. ANDREWS: Thank you.

18 THE CHAIRPERSON: May I ask one question, Mr. Hickford-
19 Kulak. You said the permanent facility that's going
20 to be bio-fuel of some kind or other. What was the
21 size of that at the Maximum One Plan?

22 MR. HICKFORD-KULAK: Right now the information that we
23 have is pointing to a low carbon solution that would
24 be in the two and a half to three and a half megawatt
25 range. Ultimately, as the system matures over time,
26 so could the load duration curve and we could end up

1 with a higher or slightly lower peak diversified
2 demand at the end of the day.

3 THE CHAIRPERSON: So if I understand you then, this 8
4 megawatt plant will always be required.

5 MR. HICKFORD-KULAK: Absolutely.

6 THE CHAIRPERSON: To satisfy the load. So it could be
7 viewed as permanent.

8 MR. HICKFORD-KULAK: Correct.

9 THE CHAIRPERSON: Thank you. Richard Revel by the way.

10 MS. TUCK: Are there any other questions for
11 clarification at this point?

12 Then we propose to mark this as Exhibit B-
13 6, so the presentation could be entered.

14 **(CORIX PRESENTATION MARKED AS EXHIBIT B-6)**

15 MS. TUCK: And we'd like to move on to the questions
16 received in advance, and I believe everybody has paper
17 copies of the responses, but we also can put them up
18 on the screen and we'll put Travis on the spot again
19 to start reviewing answers to the questions. And
20 again, please ask questions at any point if you'd like
21 anything addressed more specifically. Otherwise we'll
22 move through the questions one by one.

23 **Proceeding Time 9:31 a.m. T07**

24 MR. HICKFORD-KULAK: So I'll just -- I'll read out the
25 question and then I'll read out Corix's response that
26 we've prepared for that question.

1 So, number 1, comparison of alternatives.
2 "In your response to BCUC IR 2.1.1, you show a capital
3 cost amount of \$796,000 and state that this cost
4 includes the cost of the existing 2.3 megawatt plant
5 and the new 2.3 megawatt module. Please separately
6 provide the capital cost amount related to the
7 existing 2.3 megawatt plant and the capital cost for
8 the new 2.3 megawatt plant."

9 Corix's response to the question is: The
10 amount of \$796,000 includes the cost of the existing
11 module of \$396,000, which is the net book value as of
12 November 19th, 2015, and is not inclusive of the plant,
13 signage, and landscaping costs. And the high level
14 estimate of a new module at \$400,000 that would also
15 -- that was also used in the alternative model for 2.3
16 megawatt addition as provided in confidence in IR
17 responses.

18 MS. WALSH: Sarah Walsh from the Commission. Could I
19 just ask a quick follow-up on that one. So, in
20 reference to the original -- or, if you look at table
21 8 of the -- which shows the incremental capital cost,
22 and the project to date, 2014, of 565,966, and I see
23 you're going to provide better details about that. I
24 just wanted to quickly ask, in 2015 there is an
25 addition of \$30,000. I'm just wondering what that
26 \$30,000 is related to.

1 MR. HICKFORD-KULAK: So, the \$30,000 is related to the
2 requirement that was imposed on Corix by the City of
3 Burnaby and B.C. Hydro to upgrade our electrical
4 service from a temporary overhead service to an
5 underground service. That has since been completed.

6 MS. WALSH: So that would technically form part of the
7 initial 2.3 megawatts.

8 MR. HICKFORD-KULAK: It would be overall captured within
9 that total cost associated with that.

10 MS. WALSH: Thank you.

11 MR. HICKFORD-KULAK: Okay? "With regards to the capital
12 cost for the new 2.3 megawatt plant, please provide a
13 detailed breakdown of the cost components and explain
14 how this cost was determined, including any
15 assumptions made."

16 Corix's response is: Corix has not
17 completed a detailed cost analysis of the 2.3 megawatt
18 plant, as the implementation of such a unit is
19 impractical due to the development of the project to
20 date, *i.e.*, the inadequate load of the original
21 application, additional operating costs, for the
22 second module. The \$400,000 was a high level estimate
23 for a containerized plant based on Corix's previous
24 experience with the first 2.3 megawatt module.

25 Next question? Okay.

26 THE CHAIRPERSON: We're all looking at you.

1 MR. HICKFORD-KULAK: Yeah. Waiting in anticipation.

2 "Table 8 of the application shows a capital
3 cost of the existing 2.3 megawatt plant of \$565,966,
4 as of 2014. Please provide a detailed breakdown of
5 the \$565,966, including separately showing any soft
6 costs included in this amount."

7 Prepared Table A, which everyone has in
8 front of them, I hope. And a little bit of an
9 explanation as to how we came up to that \$565,000 cost
10 is, in the annual reporting the way -- the annual BCUC
11 reporting, the way that certain assets are classified
12 within that framework, some of the other components
13 from other pieces of equipment within the system have
14 actually been captured within that overall cost. So
15 one of those costs is at the actual energy transfer
16 station energy meters, and that's about -- that's
17 exactly, actually, \$21,391. And it's asset account
18 478.

19 That was included, I suppose in error. It
20 should not have been a part of that account code. It
21 should have been incorporated into the other code,
22 which is -- we didn't put it out here, but we've
23 updated the table and provided the correct number,
24 which is actually \$544,575. And then the \$1,012,432
25 for the energy transfer stations. It's a coding error
26 within the annual report.

1 Next question?

2 **Proceeding Time 9:36 a.m. T8**

3 MS. WALSH: Sarah Walsh from the Commission. Just to
4 follow up on that a bit, so when you're looking in the
5 future to remove the cost of this 2.3 megawatt TEC,
6 then would you be using the 544,000 less depreciation
7 cost? Is that --

8 MR. HICKFORD-KULAK: No.

9 MS. WALSH: No?

10 MR. HICKFORD-KULAK: We would actually be using the
11 dollar value that we presented in I believe it's IR
12 5.9 under the A-3 document that we responded to. And
13 what that is is it only pertains to the cost of the
14 actual physical containerized asset. It does not
15 include the cost of the slab or the landscaping or the
16 above ground piping and all the other stuff that would
17 actually remain on site. So the net book value of the
18 actual asset that we would be selling as of April 2016
19 would be the \$207,000 value. That would be fully
20 depreciated to that point in time.

21 MS. WALSH: Sarah Walsh from the Commission. Just to
22 follow up on that then, so when you're looking at the
23 cost projection for the 8 megawatt TUC, would that
24 cost then -- should that cost really include the
25 remaining costs that would not be removed, the costs
26 that you were just speaking about?

1 MR. HICKFORD-KULAK: Those costs have already been
2 capitalized into rate base and therefore it wouldn't
3 -- yeah, we wouldn't include it again.

4 MS. WALSH: Right.

5 MR. HICKFORD-KULAK: Because it's already money spent.

6 MS. WALSH: But you would just continue to recover --

7 MR. HICKFORD-KULAK: Yeah. So when we build the new
8 plant, the acquisition cost of that asset would be
9 capitalized into rate base, in addition to the other
10 costs that are already residing in there, pertaining
11 to the original plant, minus the actual asset as we've
12 sold it.

13 MS. WALSH: And would those remaining costs still be
14 utilized as part of the --

15 MR. HICKFORD-KULAK: Correct.

16 MS. WALSH: -- replacement TUCs?

17 MR. HICKFORD-KULAK: Correct.

18 MS. WALSH: Okay. Thank you.

19 MS. BRAITHWAITE: Could I just clarify something. It's
20 Tannis Braithwaite from BCOAPO. So what I'll call the
21 removed cost of the 2.3 megawatt plant, is that the
22 depreciated value of the \$396,000 figure by the time
23 it's removed, or where -- I don't understand where
24 that 270,000 came from.

25 MR. HICKFORD-KULAK: The \$270,000 is the hard asset
26 component of the \$565,000. So the 565 is a value that

1 encapsulates all of the costs associated with
2 implementing the plant, and Corix has been able to
3 narrow it down to just what was the cost of the
4 physical asset itself. Everything that resides inside
5 the actual container.

6 MS. BRAITHWAITE: So how does that relate to the 396,000
7 net book value of the existing module that's in
8 response to IR -- or 1-A-1, the very top question on
9 this Advanced Questions List?

10 MR. HICKFORD-KULAK: So that was the net book value.

11 VOICE: For the calculation of the cost.

12 MR. HICKFORD-KULAK: Of the cost, and it includes some of
13 the other items that we had clarified.

14 MS. BRAITHWAITE: Okay.

15 MR. HICKFORD-KULAK: The problem is we were dealing with
16 like apples and oranges and we were comparing all
17 these different costs, and the message needs to be
18 conveyed that there's two different ways to look at
19 it. There's the actual cost of everything that we
20 spent to build the plant, and that's all the
21 permitting costs and the landscaping costs and
22 everything else that was associated with implementing
23 that energy centre. And then once the actual cost of
24 the physical plant asset, so everything that's housed
25 with -- inside of that contained. And the \$270,000
26 represents that cost. The 396, it includes some of

1 the other costs that it needs to be separated out to
2 get it down to the 270.

3 MS. BRAITHWAITE: Okay. Okay.

4 MR. HICKFORD-KULAK: Yes, Todd.

5 MR. SMITH: And just so I understand, Todd Smith with the
6 Commission, then using your \$544,000 now updated here,
7 and if you were to subtract out the \$270,000 for the
8 physical container asset, you'd be left with the net
9 book value of what is going to remain and be reused.

10 MR. HICKFORD-KULAK: Absolutely, correct.

11 **Proceeding Time 9:41 a.m. T9**

12 Next question. "So, with regards to the
13 capital costs for the new 2.3 megawatt plant, please
14 provide a detailed breakdown of the cost components,
15 and explain how this cost was determined, including
16 any assumptions made." We just went through that, my
17 apologies.

18 In Table 8, we were here, so we just spoke
19 to that.

20 "If the capital cost provided for the
21 existing 2.3 megawatt plant in responses A and B above
22 are not the same, please reconcile the amounts." The
23 cost of the existing 2.3 megawatt module used to
24 calculate the capital cost per megawatt for the
25 originally approved solution, BCUC IR 2.1.1, was for a
26 depreciated value of \$396,000 and did not include

1 signage, landscaping, and a 45-foot storage container
2 used to store leftover materials. See the breakdown
3 comparison in table B, which everybody has. And then,
4 using the initial acquisition cost of the TEC of
5 544,575 instead of the depreciated cost, table 2 in
6 the response to the BCUC IR 2.1.1 would be as follows.
7 So, as opposed to the 760 or 96,000, it would actually
8 be 944,000.

9 Section 2, project development costs. "Are
10 the project development costs being capitalized and
11 depreciated separately from the other capital costs?
12 Or are the project development costs being assigned to
13 individual capital components for the purpose of
14 determining depreciation." Corix answered "Yes" and
15 it's because they are being capitalized and
16 depreciated separately from all of the other assets.

17 "If they are being assigned to individual
18 infrastructure components, please provide a
19 breakdown." We are not doing that, so it's not
20 applicable.

21 "If the costs are being depreciated
22 separately, please provide the depreciation rate being
23 applied to the project development cost." So, Corix
24 is currently depreciating that cost over 20 years,
25 which equates to five percent.

26 MS. WALSH: Sarah Walsh of the Commission. Can you just

1 generally explain why you chose a 5 percent
2 depreciation rate, and I am just curious if that was
3 something that was contemplated during the 2010 CPCN
4 application? And you follow up by saying that it
5 wasn't explicitly mentioned in the order or the
6 decision. So, I guess I am just wondering how you
7 came about the 5 percent?

8 MR. HICKFORD-KULAK: It would be a function of
9 accounting, and we had -- we are running a 20-year
10 deferral account. So, the selection of it may well
11 have been to kind of tandem it with that 20-year
12 deferral account duration, so that that asset would be
13 fully depreciated by the time that was paid out. But,
14 we can get back to you with a formal response if more
15 detail was required.

16 MS. WALSH: Yes, that would be good, thank you.

17 **Information Request**

18 MR. HICKFORD-KULAK: In Table 8 of the application, Corix
19 forecasts an approximately \$330,000 in project
20 development costs are expected to be incurred between
21 2015 and 2020. For each year, 2015 through 2020,
22 please provide a detailed breakdown and description of
23 the nature of these project development costs. Please
24 also indicate what phase of the project each of these
25 costs relates to, i.e., temporary solution, permanent
26 energy solution, et cetera.

1 construction management?

2 MR. HICKFORD-KULAK: It would be, yes.

3 MS. WALSH: Thank you.

4 MR. HICKFORD-KULAK: Next question. "Do the 2015 and/or
5 2016 project development costs include a forecast of
6 costs related to the current application and
7 regulatory proceedings?" No.

8 "If yes" -- it's not applicable. "If no,
9 please provide an estimate for these costs." Corix
10 estimates that these costs will be in the 25 to
11 \$30,000. Corix will confirm this number once the
12 application process has concluded.

13 MS. DOMINGO: It's Yolanda Domingo here with the
14 Commission. And since we're still on the topic of
15 project development costs, maybe we can explore a few
16 more questions.

17 In some of the IR responses you've
18 indicated that the incremental project development
19 costs -- I'm talking about the numbers that you're
20 presenting in this application, that -- above the
21 90,000 that was approved in the original 2011 CPCN.
22 And so, what I understand is, the incremental
23 development costs are being included in the rate base,
24 and you've indicated that you've met with Staff in
25 April of last year to present the increased costs of
26 the project, and increased deferral account. However,

1 Corix did not specifically request Commission approval
2 for these additional costs at that time.

3 And can you explain why at that time Corix
4 believed that no specific approval was necessary? Was
5 this just a management -- a decision from the
6 management?

7 MR. HICKFORD-KULAK: So at the time that Corix met with
8 Commission Staff in April of 2014, Corix did not have
9 all the finalized details regarding the costs, and
10 Corix had mentioned to Staff that we were planning to
11 submit another application in which we would include
12 all of the updated known costs that were incurred to
13 date. So we did not feel at that time, since it was
14 an informal meeting, that we would request approval.

15 MS. DOMINGO: If I can turn your attention to BCUC IR --
16 I think it's 4.6. Maybe we could just take a look at
17 that for a minute, when you have it.

18 MR. HICKFORD-KULAK: Yes.

19 MS. DOMINGO: So in the response you've indicated that
20 Corix believes it to be appropriate to recover all
21 prudently incurred costs, and that these additional
22 project development -- excuse me, project development
23 costs are incurred, or were incurred, subsequent to
24 the submission of the 2011 CPCN. And they are, and
25 I'll quote here, "directly related to the project
26 implementation, including legal costs related to the

1 statutory right-of-way negotiations and filing,
2 infrastructure construction and the NUS service
3 agreement negotiations with developers."

4 Can you clarify each of those activities?
5 Were they at all contemplated within the scope of the
6 original CPCN application? Or were they necessary as
7 a result of any particular directives that were made
8 from that order?

9 **Proceeding Time 9:51 a.m. T11**

10 MR. HICKFORD-KULAK: Corix did not anticipate having to
11 spend as much effort and resource time on managing
12 each one of these individual components within the
13 ongoing development of that utility infrastructure.
14 We had to spend a considerable amount of time
15 negotiating with Simon Fraser University regarding
16 statutory right of ways to come to agreement on a form
17 of right of way that was acceptable to both parties.

18 Corix also experienced challenges regarding
19 the NUS Servicing Agreement and getting developers to
20 sign on to the service without going through lengthy
21 negotiation processes with each and every individual
22 developer. So these were really -- we weren't able to
23 forecast the bulk of these costs.

24 MS. DOMINGO: So just general (inaudible) were thought
25 upon during CPCN. Just the extent of the effort
26 wasn't?

1 MR. HICKFORD-KULAK: Correct.

2 MS. DOMINGO: Is that how I understand it?

3 MR. HICKFORD-KULAK: Yes.

4 MS. DOMINGO: So then just let me clarify then. The
5 90,000 that was originally included in the CPCN
6 application, that 90,000, does that include any of
7 these activities? That was just --

8 MR. HICKFORD-KULAK: To get us to the application.

9 MS. DOMINGO: That was just for the feasibility study, is
10 that correct?

11 MR. HICKFORD-KULAK: Correct.

12 MS. DOMINGO: Okay, so you had -- so I'm just wondering
13 why then we didn't include any allotment for the
14 statutory right of way and the negotiations in the
15 original CPCN. I understand that you had anticipated
16 the effort, maybe not the exact amounts. You had
17 anticipated the efforts but they weren't included?

18 MR. HICKFORD-KULAK: It was something that was missed by
19 Corix. It is a Greenfield utility. It is new. And
20 you know, there clearly wasn't a full comprehensive
21 understanding of all of the requirements around these
22 types of processes.

23 MS. DOMINGO: Okay, so I guess they should have been
24 known.

25 MR. HICKFORD-KULAK: Should have been.

26 MS. DOMINGO: Should have been --

1 MR. HICKFORD-KULAK: But it was unforeseen.

2 MS. DOMINGO: Okay. And I guess at the time of the CPCN
3 application can you inform us, and you might have
4 answered this, can you inform us of the status of the
5 NUS Agreement with the developers? Were they still --
6 were you still in negotiation at that time?

7 MR. HICKFORD-KULAK: Yeah, we were concurrently
8 negotiating that they came on. So we hadn't begun
9 negotiations with any developers prior to the issue of
10 the order in 2011. After the order was issued then
11 Corix initiated negotiations with several developers
12 and some of which took in upwards of one year to
13 finalize.

14 MS. DOMINGO: Thank you.

15 MR. HICKFORD-KULAK: Next question, number 3, salvage
16 value. "In response to BCUC IR 5.6 submitted as
17 Attachment 1, you provided the detailed calculations
18 of the net book value of the 2.3 megawatt TEC, which
19 is shown to be \$207,768 at the end of 2015, and
20 \$104,407 at the end of 2020. In Table 8 on page 9 of
21 the current application, the project to date capital
22 cost for the Temp Energy Centre is \$565,966. Please
23 recreate the schedule provided as Attachment 1 in
24 response to BCUC IR 5.6, but this time include each
25 year that the 2.3 TEC has been depreciated, starting
26 with the asset's original cost and including any

1 additions to this asset which have occurred or are
2 expected to occur. Please include all relevant soft
3 costs in this revised schedule and ensure that the
4 original costs of the 2.3 megawatt TEC reconciles to
5 the capital cost provided in Table 8 of the
6 application."

7 Corix has provided a response in the form
8 of Table C.

9 **Proceeding Time 9:56 a.m. T12**

10 MS. WALSH: Sarah Walsh from the Commission. Could you
11 just clarify what the in-service date was of the
12 assets?

13 MR. HICKFORD-KULAK: It would have been April -- or,
14 April, 2012.

15 MS. WALSH: Okay. Thank you. It's just I was looking at
16 table -- or IR 1(d). And it says "Acquisition costs,
17 Jan. 30th, 2014."

18 MR. HICKFORD-KULAK: It's when -- it's an account -- it's
19 a function of our accounting program. It's just when
20 it pulled the number out.

21 MS. WALSH: Okay. So it is April 30th -- or, April, 2012.

22 MR. HICKFORD-KULAK: Correct.

23 MS. WALSH: Okay, thank you.

24 MR. HICKFORD-KULAK: Next question, number 4, general
25 methodology. "In response to BCUC IR 13.2, you state
26 'The annual energy demand forecast is based on the

1 annual energy usage of 100 kilowatt hours per meter
2 square, to allow for anticipated future design
3 improvements that reduce energy usage.' On page 14 of
4 the application filed as Exhibit B-1, you indicate
5 that using the EUIs presented in Table 3, the actual
6 and forecasted loads based on updated hydraulic
7 modeling is presented in Table 4. For clarity, Table
8 3, as referenced, shows an EUI of 105 kilowatt hours
9 per meter square for low-rise, and 130 kilowatt hours
10 per meter square for high-rise, and an average EUI of
11 117 kilowatt hours per meter square. Please comment
12 on whether the ratio of low-rise to high-rise
13 buildings in the terms of GFA for connected buildings
14 is similar to the ratio of low-rise to high-rise
15 buildings in terms of GFA for future developments.
16 Please quantify if possible."

17 So, yes, the ratio is similar. The current
18 ratio of the low-rise to high-rise connected is 48
19 percent low-rise and 52 percent high-rise. The
20 remaining ratio is 55 percent low-rise and 45 percent
21 high-rise, making the total connection ratio 49
22 percent low-rise and 51 percent high-rise. So it is
23 very balanced in terms of the ratio.

24 Next question, "Please explain how Corix
25 has determined a downward adjustment of the annual
26 energy usage to 100 kilowatt hours per meter square,

1 rather than a value higher or lower. Is it
2 appropriate to reflect anticipated future design
3 improvements that reduce energy usage?"

4 100 kilowatt hours per meter squared
5 provided in IR 13.2 was in error. The actual number
6 used is 117 kilowatt hours per meter square as an
7 average. And Corix has projected the connection that
8 the energy use intensities in our modeling respective
9 of the numbers that we've seen pertaining to low-rise
10 and high-rise individually. So for low-rise
11 buildings, we're projecting 105 kilowatt hours per
12 meter square, and for high-rise buildings we're
13 projecting 130 kilowatt hours per meter square.

14 MS. CHEUNG: Hillary Cheung, Commission staff. I just
15 want to follow up on -- can you clarify whether the
16 117 kilowatt hours per meter square is applied to all
17 future low-rise and high-rise developments in Corix's
18 demand forecast? Or are they forecasted separately
19 for low-rise and high-rise buildings?

20 MR. HICKFORD-KULAK: They're forecasted separately.

21 MS. CHEUNG: Okay. Thanks.

22 MR. HICKFORD-KULAK: "In response to BCSEA IR 4.2, you
23 state the updated ASHRAE standards which buildings
24 need to comply with as part of the new B.C. Building
25 Code, now supersedes the UniverCity density bonus
26 program, and it is Corix's understanding that a new

1 program may be implemented to incentivize developers.
2 Please explain which anticipated future design
3 improvements that reduce energy usage have been
4 accounted for in the annual energy usage assumption of
5 100 kilowatt hours per meter square."

6 As stated in the response above, the
7 average EUI is actually 117 kilowatt hours per meter
8 square, and Corix has not allowed for any future
9 design improvements. We should -- we only have based
10 our forecasts on what we know to date.

11 **Proceeding Time 10:01 a.m. T13**

12 THE CHAIRPERSON: Richard Revel, Commissioner. Just an
13 elaboration on that one. Did you account for the fact
14 that the usage over the last few years has been higher
15 than your original estimate?

16 MR. HICKFORD-KULAK: Yes.

17 THE CHAIRPERSON: So this is corrected for actual
18 experience?

19 MR. HICKFORD-KULAK: Correct.

20 THE CHAIRPERSON: Thank you very much.

21 MR. HICKFORD-KULAK: Question number 5, energy efficiency
22 requirement/EUI. "In response to BCUC IR 14.1, you
23 state 'It is Corix's understanding that not all of the
24 buildings constructed to date achieve the density
25 bonus offered by the Community Trust. Four of the six
26 buildings have received the bonus.' Please comment on

1 how the EUI of buildings that receive the density
2 bonus from the Community Trust compare with the EUIs
3 of buildings that did not."

4 Corix's response is, there is no noticeable
5 difference in the EUIs based on the buildings that
6 achieve the density bonus. The only noticeable
7 difference is between wood frame and concrete type
8 buildings. Again, it is very consistent, it's very
9 balanced. High rises, they are all around 130; low
10 rises, they are all around 105.

11 THE CHAIRPERSON: It's Richard Revel again. This is
12 ancillary to it, but as I read through the evidence, I
13 was curious. The Trust put out building design
14 standards. Presumably, the way I read the evidence,
15 that those were only more or less have got guideline
16 nature because some of the developers didn't comply
17 with them.

18 Was the decision to allow them to go
19 through the decision of the Trust, if I may ask? And,
20 if so, did Corix have any input into the approval of
21 the developers' proposals? Who oversees, in essence,
22 the acceptance of the designs from developers?

23 MR. HICKFORD-KULAK: Pertaining to the density bonus
24 allocation?

25 THE CHAIRPERSON: Well, pertaining to the construction of
26 the buildings. Some of them were built to lower

1 standards than the guidelines I believe.

2 MR. HICKFORD-KULAK: So, Corix routinely conducts a peer
3 review process on every single individual that
4 connects to the NUS. And we designed the
5 infrastructure according to the information that is
6 provided to us, and we try to work with the
7 developer's consultants to get them to optimize their
8 system. The heating system, or HVAC system.

9 The density bonus that was being awarded
10 did not just pertain to the energy system within the
11 building. It incorporated things like storm water
12 management, and lighting, and many other aspects of
13 the overall guideline requirements. So, Corix
14 reviewed and to the best of its ability tried to
15 ensure that developers were building efficient
16 infrastructure that would ultimately operate in an
17 efficient manner in connection with the NUS.

18 THE CHAIRPERSON: So from an energy perspective then, I
19 understand, all of the -- would it be fair to say that
20 all of the buildings complied with expectations of
21 energy consumption by design? By construction?

22 MR. HICKFORD-KULAK: To energy demand, but the
23 consumption is something that happens after the fact.

24 THE CHAIRPERSON: I understand, yes. So from an energy
25 requirement perspective, the physical buildings, as
26 built, were up to standards?

1 MR. HICKFORD-KULAK: We can't comment on whether or not
2 they met specific criteria associated with the Trust
3 guidelines. We can only comment to the HVAC system,
4 and whether or not it was compliant with the
5 guidelines that were issued by Corix regarding that
6 system.

7 THE CHAIRPERSON: Thank you.

8 **Proceeding Time 10:05 a.m. T14**

9 MR. HICKFORD-KULAK: Number 6, data. "In response to
10 BCUC IR 14.3 you state: It is able to access detailed
11 historical information from the energy meters used for
12 billing purposes. Attachment 4 provides the actual
13 consumption data for six connected parcels for Year
14 2014. Based on the historical data collected from
15 energy meters, does Corix observe any changes or
16 trends in consumption in terms of EUI over time for
17 each connected building from connection to date? If
18 yes, please explain whether Corix has accounted for
19 any changes in consumption over time in its demand
20 forecast."

21 Corix responded with: Corix has observed
22 variances in usage between when the developer is still
23 finalizing/occupying the building and when the actual
24 residents obtain possession. Typically the first year
25 of a building is connected, it is the highest energy
26 usage period the developer is -- they've got windows

1 open and they're heating all kinds of stuff, trying to
2 dry the building out. Corix has observed that this
3 appears to be a result of the building settling into
4 its normal operation. This is especially noted with
5 concrete high-rises.

6 As noted in the response to IR 4(b), Corix
7 has considered these factors when making future
8 projections around energy usage and thus has allowed
9 for reduction in the projected EUIs. And that's only
10 pertaining to the period when it's first on. Some of
11 the buildings have phenomenally high EUI usage in the
12 first six months to year when the developer will still
13 have possession of that building. So our projections
14 are based upon actual resident occupant behaviour.

15 MS. CHEUNG: Hillary Cheung, Commission Staff. Can you
16 please elaborate on whether or not you observe any
17 changes in resident use in terms of EUI?

18 MR. HICKFORD-KULAK: Not today.

19 MS. CHEUNG: Okay.

20 MR. HICKFORD-KULAK: That concludes Corix's response to
21 the advanced questions.

22 MS. CHEUNG: And while we're still on the topic of demand
23 forecasting, I have two additional questions. Can you
24 just generally provide -- sorry, I'm just turning your
25 attention to BCUC IR 15.1. So in response to the BCUC
26 IR 15.1, Corix states the utility must design capacity

1 based on historical coldest day criteria. Would you
2 please confirm that Corix's capacity need as presented
3 in this application is designed based on historical
4 coldest day criteria and if not, please elaborate.

5 MR. HICKFORD-KULAK: The current design that Corix is
6 proposing is based on historical information and data
7 that we've collected pertaining to the operation of
8 the NUS.

9 MS. CHEUNG: So just to clarify, so the historical
10 coldest day criteria, can you elaborate on what that
11 criteria is?

12 MR. HICKFORD-KULAK: Sorry, could you repeat the question
13 again?

14 MS. CHEUNG: The quote mentions the utility must design
15 capacity based on historical coldest day criteria.
16 Can you elaborate on what the coldest day criteria is?
17 For example, whether or not it is a historical coldest
18 day occurrence of once in how many years? Or is that
19 --

20 MR. HICKFORD-KULAK: The coldest day criteria is
21 represented in the load duration curve, the updated
22 load duration curve that Corix provided.

23 Robert, are you able to elaborate on the
24 data that we use to project those coldest day
25 averages?

26 MR. DOYLE: I mean, going back to the original EUIs,

1 there was data collected from different sources.
2 Different consultants had looked at different energy
3 use projections. And that was taken from basically
4 the GVRD, the Greater Vancouver area, and we used
5 information specific to Burnaby Mountain. So then
6 they looked at the heating degree days and the actual
7 difference on Burnaby Mountain and projected that
8 information for Burnaby Mountain.

9 But most of it was numerical, it was
10 manipulating numerical information to project what it
11 would look like in the future. But it's based on a
12 design day, is what the criteria was for burning
13 amount.

14 MS. CHEUNG: Okay, and just a general question. Can you
15 please comment on how confident Corix is with its
16 updated annual energy demand forecast in light of the
17 differences that you observed in the original
18 application versus this one?

19 MR. HICKFORD-KULAK: Based on the four and a half, almost
20 five years of historical data that we have pertaining
21 to the ongoing operation of this utility, Corix is
22 very comfortable with the projections that are
23 currently being made. There are many things that
24 we've noted in responses to certain IRs that are
25 outside of the utility's control, but in general terms
26 we are very comfortable with the projections that we

1 are currently making.

2 MS. CHEUNG: All right, thank you.

3 **Proceeding Time 10:11 a.m. T15**

4 MR. SMITH: Todd Smith. Just a follow-up on that. The
5 question was, sorry, that -- my understanding of your
6 answer to what was the historic coldest day criteria
7 was that it was based on GVRD data made specific to
8 Burnaby Mountain somehow.

9 MR. DOYLE: Correct.

10 MR. SMITH: That used -- that's based on design day. For
11 those of us that aren't as familiar with whether it's
12 ASHRAE or other design standards, what does a design
13 day mean?

14 MR. DOYLE: I guess to clarify in terms of the
15 information that's being used today is based on
16 historical information. So, if we're going back to
17 the original projections, the appellant in this --

18 MR. SMITH: Sorry. This, I think, goes to the peak design
19 capacity, right?

20 MR. DOYLE: Correct.

21 MR. SMITH: So not historical usage or EUI. But what's
22 the peak design capacity.

23 MR. HICKFORD-KULAK: The projection that we're making is
24 a combination of the two. It's the historical
25 information that we have pertaining to the demand
26 intensity that we built existing infrastructure to,

1 and what our projection of what that's going to be in
2 the future. We don't anticipate it to change. We
3 anticipate it to stay on the same path that it's
4 continued to travel over the last five years.

5 Those numbers were originally come up with
6 based on design day temperatures, which pertain to
7 Burnaby Mountain. So we know that at -- for instance,
8 negative eight is -- that's the peak demand scenario,
9 where our system will actually operate at its highest
10 temperature, because that would be considered a design
11 day temperature.

12 MR. SMITH: Okay. So when -- Todd Smith still here. And
13 this is just to help our understanding of it, in the
14 design basis. Because the nature -- the context of
15 the question was around the design capacity of the
16 system. And it would seem that that's related to --
17 not sort of your average usage, or anything like that,
18 but what is that coldest design day that you designed
19 the capacity of the system for. And you mentioned
20 minus 8. Is that the design day temperature that you
21 use to design the capacity of the system for? And you
22 mentioned minus eight. Is that the design day
23 temperature that you use to design the capacity of the
24 system, or is there another number?

25 MR. HICKFORD-KULAK: Again, it's a combination. But in
26 terms of when the total anticipated peak demand draw

1 on the system would be, we've designed that to about
2 around the negative 8 mark.

3 The demand intensity usage, the --
4 expressed as a watts per minute square, the amount of
5 capacity we've allocated to any one building, is based
6 on that peer review process that we identified earlier
7 in the back and forth with developers. Typically
8 developers will come with a very, very high number.
9 They're going to be up around 80 watts per meter
10 square. And we know, based on our projections of
11 design, that they should be right in the 50 watts per
12 meter square, or a little bit lower than that, with
13 regards to demand intensity, and that's what we've
14 based our projection on into the future, is on that
15 specific demand intensity, based on that reset at
16 negative 8.

17 MR. DOYLE: And just to add to that, in terms of -- it's
18 Robert. Historical information allows -- the metering
19 allows you to capture that peak demand for any one
20 building as well. So when projecting going forward,
21 we're using metered -- actual metered demand
22 information which gives you 15 minute average, but
23 also will store the maximum peak that that building
24 has used.

25 So, really, our experience -- my experience
26 is that the best information moving forward is what

1 you -- what we've collected in the past versus what we
2 modeled originally, which is -- which was a paper
3 exercise. This is an actual recorded information from
4 each unit. And that's what's being used moving
5 forward.

6 MR. SMITH: And so that would be the basis for coming up
7 with the 9.2 megawatt demand in the future when all
8 the buildings that are planned to be connected are
9 connected.

10 MR. DOYLE: Correct.

11 MR. HICKFORD-KULAK: Correct.

12 MR. SMITH: Thank you.

13 MS. CHEUNG: This is a follow-up question. Hillary
14 Cheung, Commission staff.

15 When you mentioned your using the
16 historical data to come up with the coldest day design
17 day, how many years of historical data feeds into that
18 number? Or you have consulted to get to that number.

19 MR. HICKFORD-KULAK: We have, as I mentioned earlier, we
20 have almost five years of historical real trend data.
21 However, the first year of a building's operation, we
22 typically discard that because, as I mentioned, the
23 developers are largely in control of the buildings,
24 and we tend to see very rapid swings in demand and
25 energy usage.

26

Proceeding Time 10:16 a.m. T16

1 MR. DOYLE: I guess what I would also add, and in terms
2 of demand and energy, I'd like to qualify the two with
3 the way I understand it. It's Robert. Is that the
4 energy varies can vary quite significantly year to
5 year, depending on the heating degree days, or how
6 cold that year was. Whereas the demand does not, the
7 actual peak capacity you need to service that does not
8 vary so much.

9 So, you tend to get very close to your
10 demand every year, what you project, and that's what
11 we are using the 50 watts per meter square. The
12 energy can vary quite significantly, depending on
13 occupancy in the buildings. Is it a cold year? Is it
14 a warm year? So, there can be quite a bit of variance
15 in that 117 average number of kilowatt hours per meter
16 squared. That will vary year to year. It's a cold
17 year, it's a warm year, that can vary 10 or 20
18 percent.

19 THE CHAIRPERSON: Well, if there are no further
20 questions, I note that it is in the order of 10:17,
21 perhaps we might take a 10 minute break, and then
22 we'll proceed with further questions.

23 Thank you very much, Mr. Hickford-Kulak and
24 your colleagues.

25 MR. HICKFORD-KULAK: Thank you.

26 **(PROCEEDINGS ADJOURNED AT 10:18 A.M.)**

1 **(PROCEEDINGS RESUMED AT 10:33 A.M.)**

2 THE CHAIRPERSON: Well, I believe we are all here
3 together now, and I understand that Corix would now
4 like to register the exhibits, is that correct? Those
5 were not done?

6 MS. TUCK: Yes, please.

7 THE CHAIRPERSON: Thank you, Ms. Tuck.

8 MS. TUCK: So, that's Exhibit B-7, the responses to the
9 advanced questions.

10 **(CORIX RESPONSES TO ADVANCE QUESTIONS WITH THREE**
11 **ATTACHED TABLES MARKED EXHIBIT B-7)**

12 MS. TUCK: We'd also like to provide a clarification.
13 There was a question, advance question 2(a)(ii). We
14 had a question how to explain the project development
15 cost depreciation rate chosen of 5 percent, and we
16 asked for a moment to consider that, and David Liesch
17 will address the question and provide a response.

18 MR. LIESCH: David Liesch here. Yeah, we have sent a
19 query back to our accounting department, and basically
20 when they were going through all of the assets at the
21 commencement of the project, we had to put everything
22 in the system. I guess Travis and the accounting
23 department went through line by line all of the assets
24 and for physical assets they used life of the asset.
25 For that one, the development costs we thought, I
26 guess, 20 years was a reasonable life. It's not --

1 to BCSEA, which is Exhibit B-4, and in response to IR
2 1.1 said that the list of requested approvals in the
3 application remains the same, and my question is to
4 confirm that the draft order as attachment 1 remains
5 the requested approval at this time?

6 MS. TUCK: Ann Tuck, yes it does.

7 MR. ANDREWS: Thank you. To a more substantive topic,
8 this has to do with the energy forecast and the Simon
9 Fraser Trust design bonus. First, maybe -- I think I
10 now understand, and please, the question is to correct
11 me if I am wrong, that the term is density bonus.
12 Density is just a word that captures bonuses available
13 for a number of different desired features, is that
14 correct?

15 MR. GALICZ: We have moved away from -- currently from
16 our density bonus program, but historically --

17 THE CHAIRPERSON: Excuse me, can I ask you to identify
18 yourself?

19 MR. GALICZ: My name is Jesse Galicz, I work for the SFU
20 Community Trust. Historically in our green building
21 requirements and guidelines, we had a density bonus
22 program that was for storm water management and for
23 energy efficiency. For energy efficiency, it meant
24 removing a whole building's energy use from 30 percent
25 to 45 percent more efficient than the model national
26 energy code. Now our buildings have to meet the

1 ASHREA Standard, and forgive me, I'm not an engineer
2 or a building energy modeler, but in the layman's
3 version, our buildings now have to meet ASHREA. So
4 it's a similar standard to what they had to meet under
5 our density bonus program.

6 So, moving forward we have selected
7 specific items such as thermal bridging and windows
8 and things like that to help improve energy efficiency
9 of our buildings under our requirements.

10 MR. ANDREWS: And just so I am clear, the term "density"
11 there --

12 MR. GALICZ: Density relates to the amount of building
13 area that can be built on a specific building site.
14 So, the developer can build a larger building, to get
15 more buildable floor area if they achieve a higher
16 energy efficiency with their building, and basically
17 we have moved away from that program, and we have
18 allowed, under our zoning, all buildings to maximize
19 their gross floor area.

20 MR. ANDREWS: So that continuing with the way things
21 stood at the time that the original load forecast was
22 made, a building in its construction could fail to get
23 the density bonus because of something that isn't to
24 do with energy efficiency as such. And therefore, the
25 fact that not all of the buildings got their density
26 bonus is not directly an explanation of why the actual

1 energy load turned out to be much higher than
2 forecast?

3 MR. GALICZ: Yeah, I don't think the density bonus has a
4 direct relation to energy use. Travis or someone from
5 Corix could correct me on this, but all of the energy
6 modeling originally would have been done on the
7 maximum buildable area, I would imagine, for the NEU.

8 Is that correct Travis?

9 MR. HICKFORD-KULAK: Yes.

10 MR. GALICZ: Yes. So, basically as far as the densities
11 that can be achieved on the building site, the
12 modeling that was done initially was done for the
13 maximum buildable area that could be achieved, which
14 would include the density bonus. So, the way that we
15 worked at -- the way the SFU Community Trust, our
16 zoning that we achieved would include all the
17 allowable building area that could be built on a
18 development site. We actually reserved some of that
19 density and offered it as a density bonus and
20 incentive for developers. But from the City of
21 Burnaby, the zoning that we have in place allowed for
22 that maximum density, including the density bonus. If
23 that makes sense.

24 **Proceeding Time 10:41 a.m. T18**

25 MR. ANDREWS: So let me step back, then, and ask about
26 the original energy forecast, which turns out to have

1 been low in relation to actual energy usage. And
2 maybe you could summarize why the forecast was so low,
3 and how we can be confident that the forecasts for the
4 future, in terms of future sizing, are going to be
5 more accurate.

6 MR. HICKFORD-KULAK: Travis Hickford-Kulak. So, you
7 know, Corix has openly admitted in the response to the
8 some of the IRs pertaining to this question around,
9 you know, why was this number -- this low number used.
10 And I think it has a lot to do with potentially a
11 misunderstanding of how that number was -- that
12 density bonus was to be interpreted in terms of actual
13 energy usage, and energy demand pertaining to the
14 buildings that were going to be constructed at
15 UniverCity. And the interpretation of what that
16 density bonus encapsulated ultimately, you know, it
17 didn't lead to the energy efficiencies that were
18 forecasted, and we actually ended up seeing the
19 buildings perform more in line with a standard
20 building located within the Lower Mainland.

21 So it was definitely a very aggressive
22 method of forecasting, and how are we mitigating this
23 moving forward and ensuring that our projections are
24 more in line and reasonable is by way of historical
25 data that we collect, not only from the UniverCity
26 NUS, but from many of the other district energy

1 utility operations that Corix either owns and operates
2 or operates on behalf of another owner.

3 MR. ANDREWS: My next topic, related, is encouragement of
4 energy efficiency and conservation usage by occupants.
5 And you've indicated that there is some effort in that
6 regard. Can you elaborate on what Corix and/or SFU is
7 doing in that respect?

8 MR. HICKFORD-KULAK: So, pertaining to the actual
9 promotion of energy efficiency, Corix is active within
10 the community and routinely offers to meet with strata
11 councils, and it routinely engages with developers
12 through the peer review process when the building is
13 being designed, and is currently in the process of
14 publishing a website for each of the thermal energy
15 utilities that Corix operates, of which UniverCity
16 will be included, that will have a page dedicated to
17 conservation and how can residents ultimately reduce
18 their energy usage through simple methodologies of,
19 don't open your window in the middle of winter to cool
20 your home down, simply turn down your thermostat.

21 MR. ANDREWS: Is that something that Corix would describe
22 as a demand-side management program?

23 MR. HICKFORD-KULAK: I believe it ties in to a DSM type
24 measure, but it doesn't fully encapsulate -- I mean,
25 it depends as to how far you want to look into design
26 -- or, sorry, demand-side management. I mean, you

1 know, you can go to the extent of in-suite metering
2 and monitoring and, you know, that would probably be
3 the extreme end of the scale. And, you know, to
4 start, I think, you know, the web page based
5 information would probably be a good start to maybe
6 lead into that, and Corix is open to exploring
7 opportunities around DSM, but to date haven't
8 investigated things like suite-level metering in any
9 great detail.

10 THE CHAIRPERSON: Mr. Andrews, if I may, you raise an
11 interesting question, and I'd like an ancillary one.
12 Let me understand where Corix's mandate begins and
13 ends with regard to buildings. Would it be correct to
14 say that your mandate ends at the meter going into the
15 building, and that you exercise no control whatsoever
16 on the upstream side of the meter? And is the
17 exercise -- is your input only advisory in that
18 capacity?

19 **Proceeding Time 10:46 a.m. T19**

20 MR. HICKFORD-KULAK: Correct.

21 THE CHAIRPERSON: Okay, thank you. Thank you, Mr.
22 Andrews, for raising that.

23 MR. ANDREWS: Thank you. Corix is aware, though, of the
24 general requirement that a public utility plan for
25 demand-side management programs, and I assume that if
26 the answers previously have been that it would be

1 premature to develop official DSM programs, is that
2 generally -- for this district utility system. Is
3 that a roughly accurate statement?

4 MR. WIGINTON: Ian Wiginton, Corix. Yes, we think it --
5 you know, as Travis has indicated, we're certainly
6 open to investigating that. It's a very small utility
7 and a demand-side management program, at least the
8 type that I'm familiar with, that has been brought
9 before the Utilities Commission, been brought by very
10 large utilities and there is a lot of costs involved
11 in developing and monitoring and proving out the DSM
12 on these programs, and those are sunk costs in
13 addition to any measures, physical measures, that you
14 might get involved in.

15 So, with the smaller utilities, I'm not
16 aware that they have pursued demand-side management
17 programs such as, you know, offering incentives to put
18 in-suite metering, and things like this. But we are,
19 again -- we're open to considering that. But we
20 haven't gone down that line yet.

21 MR. ANDREWS: Thank you. And to be clear, I'm not
22 proposing that DSM is part of what should come out of
23 this particular proceeding.

24 In a sense, this then leads me to the next
25 -- to my next topic, which is the low-carbon centre.
26 In the materials, in the response to the IRs, you've

1 indicated that the current plan is that it would be in
2 place in 2017/2018, and that it is awaiting, I gather,
3 two things. One is the sizing, depending on whether
4 it's to serve load within the university itself, in
5 addition to the residences, and the other being
6 provincial approvals of some sort.

7 Can you elaborate on both those aspects and
8 what the current status is?

9 MS. SAFAR: Ivana Safar, Corix. So, that's correct. We
10 -- the implementation of the permanent solution is
11 still subject to final decision on what solution or
12 application will be implemented at the university. We
13 have original application, or solution was to
14 implement a small low-carbon energy centre just
15 serving residents. But throughout the process of
16 physically the study and later in some of the
17 developments of the -- of our utility at UniverCity,
18 we also started to work with Simon Fraser University
19 on potential implementation of bigger low-carbon
20 solution and a plan, that would serve both customer
21 groups. So big customer, Simon Fraser, and residents
22 at UniverCity.

23 And so this process is in works, and that's
24 why the timing of 2018/19 in our response is basically
25 when they expect solution to be implemented, but that
26 it's one or other. So the bigger solution is subject

1 to provincial approvals, as you mentioned, and the
2 final approvals by SFU Board of Governors. And the
3 smaller solution is basically developed concurrently,
4 and if the Simon Fraser does not approve next year,
5 then we are moving forward with the smaller solution.

6 MR. ANDREWS: Are the provincial approvals related to the
7 Simon Fraser participation?

8 MS. SAFAR: Yes. Yes.

9 MR. ANDREWS: To do with provincial funding.

10 MS. SAFAR: Provincial funding --

11 MR. ANDREWS: As opposed to, for example, anything to do
12 with physical structure.

13 **Proceeding Time 10:50 a.m. T20**

14 MS. SAFAR: No, but it is related to Simon Fraser being
15 part of the project. The construction -- no, that
16 will be subject to approvals from the City of Burnaby
17 on building permit and development permit.

18 MR. ANDREWS: Thank you. My last topic has to do with
19 the overall process in terms of regulatory efficiency,
20 and the development of the thermal energy system
21 guidelines and this process coming out of that whole
22 development of guidelines. And my question is,
23 whether Corix feels that this particular process is
24 working well in terms of meeting its needs and the
25 needs of its ratepayers, and whether Corix has any
26 observations about whether the guidelines are

1 conducive to -- are the guidelines working as
2 indicated by this particular application?

3 MR. WIGINTON: Ian Wiginton, Corix. I think in our view
4 the guidelines, which we were part of the process
5 which established those guidelines, the guidelines are
6 recently established, so we're still -- some of the
7 nuances on those guidelines are still being
8 determined. But from our perspective what we've seen
9 so far, that the guidelines are appropriate for these
10 types of projects, and that periodically that, you
11 know, as we are here today, we would come before the
12 Commission and provide updates on projects and further
13 build-out when it is appropriate. So in our view,
14 yes, the guidelines are working.

15 MR. ANDREWS: Thank you, I have no further questions.

16 THE CHAIRPERSON: Thank you very much, Mr. Andrews.

17 MS. BRAITHWAITE: Tannis Braithwaite with BCOAPO.

18 I also would like to explore a bit about
19 the discrepancy between the original energy use
20 intensity forecast and what the utility has
21 experienced in that regard so far. In BCOAPO IR 8.1,
22 Corix was asked to explain why the energy use
23 intensity in the initial application was calculated to
24 be 68 and the actual EUI in the development is nearly
25 double that at 117. And in Corix's response, you
26 provided three reasons, and I'd like to start actually

1 with the third reason given, which is that tenant
2 behavior may have a significant influence on energy
3 use. However, this is not something that was modeled.

4 In responses to subsequent IRs, Corix said
5 that this was just based on anecdotal information and
6 it didn't actually had any evidence that tenant
7 behavior was a significant influence on energy use.
8 And I am wondering whether Corix is of the opinion
9 that the behavior of tenants versus owners be
10 something that is modeled in developments going
11 forward, based on the anecdotal information that
12 you've received? Would that be a useful thing to do?

13 **Proceeding Time 10:54 a.m. T21**

14 MR. HICKFORD-KULAK: Travis Hickford-Kulak, Corix
15 Utilities. If we had that level of information, we
16 may be able to use it to refine our modeling of EUI
17 projections. But it's really -- it's not that simple.

18 You have people that are cognizant of their
19 energy usage whether they are a tenant or an owner,
20 regardless. And it's just, I mean -- it's something
21 that we can't really put our finger on per se. All we
22 can really do is monitor things from a historical
23 perspective and try to make more informed assumptions
24 and decisions in projections, so that we try to, you
25 know, properly reflect what the actual usage is in any
26 given area.

1 MS. BRAITHWAITE: Okay, so the reason given in response
2 to BCOAPO IR 8.1 was that not all of the buildings
3 were constructed and qualified for the density bonus,
4 which implies those buildings were not constructed in
5 accordance with the Trust's guidelines designed to
6 achieve the EUI values in the 2011 CPCN.

7 We heard earlier today, in response to
8 Commissions Staff advanced questions, question number
9 5, that in fact there's no noticeable difference in
10 EUIs based on the density bonus. And am I correct to
11 understand that that means whether or not the building
12 is qualified for the density bonus or not, it hasn't
13 had any real impact on energy use intensity. That's--

14 MR. WIGINTON: Ian Wiginton, Corix. That's what we've
15 observed, you're correct. The reasons that we gave
16 there, those lists, we said they were potential
17 reasons. So, again, we don't have -- we can't really
18 put our finger on exactly why we're observing the
19 higher energy use on those -- on the buildings
20 generally. But these are possible reasons that you
21 could put in the mix. So some of them are physical,
22 in terms of building infrastructure, and some of them
23 might be behavioral because of occupant behaviour. We
24 have -- we can suspect or we can have -- we suspect
25 that a lot of it is occupant behaviour potentially,
26 but again, we haven't got definitive studies to tell

1 us one way or another.

2 Going forward, as Travis indicated, we
3 think it's prudent that we reflect a demand forecast
4 that is -- reflects our last five years of actual
5 energy use.

6 MS. BRAITHWAITE: And going forward for new developments,
7 I mean this may be getting beyond the scope of this
8 proceeding, but does Corix have any suggestions or
9 plans for how -- I mean, you're going to have
10 developments where you're not going to have actual
11 data -- new developments. And so the three reasons
12 that have been provided, and I've only gotten to two
13 of them so far, but none of them seem to actually have
14 any impact on EUI. And so what is the proposal for
15 improving the energy use intensity forecast? Or is
16 there one in other kinds of developments?

17 MR. WIGINTON: Ian Wiginton, Corix. We've indicated that
18 we are embarking on an information program for --
19 because we suspect that some of the reasons that we're
20 quite high EUI is because of occupant behaviour. So
21 we think that an information program along the lines
22 of what Travis indicated would be an appropriate
23 response, again, from us at this point. And again, we
24 will monitor going forward and reflect that in future
25 decisions of the utility.

26

Proceeding Time 10:58 a.m. T22

1 MS. BRAITHWAITE: Okay. I would still actually like to
2 ask a couple of questions on the first reason,
3 potential reason given by Corix in response to that
4 information request. The first reason is the EUI
5 values in the 2011 CPCN were estimates based on
6 engineering criteria, and these estimates may have
7 been overly optimistic. What engineering criteria are
8 you referring to in that response? Is that within the
9 building code criteria? Or --

10 MR. DOLE: Correct. It's Robert. The original estimates
11 were done by a couple of different consultants in
12 terms of doing physical models for different generic
13 types of structures. And making assumptions about how
14 they would be built in the future. I think there is a
15 disconnect between how they are being built, and the
16 assumptions made generally on this community was going
17 to be built. So, there was a disconnect. They were
18 overly optimistic, I absolutely agree, in terms with
19 what is being done looks more like an opinion, my
20 opinion, the status quo, versus what the assumptions
21 were originally.

22 MS. BRAITHWAITE: Okay, and has that been addressed by
23 the incorporation of the new ASHRAE standards into the
24 building code?

25 MR. DOLYE: Well, I can't answer that one.

26 MR. GALICZ: Yeah, I don't have enough information that

1 question at this time. So if -- that's a question
2 we'd like to review. I think that we could have our
3 consultants review and answer that and provide an
4 answer, if that's fair?

5 MS. BRAITHWAITE: Okay, yes, thank you.

6 THE CHAIRPERSON: If I may interject. Are you suggesting
7 that you would like that as an undertaking or will you
8 be able to get the response fairly promptly, perhaps
9 in the next --

10 MR. GALICZ: I can bring that back to our office and see
11 if we can provide a response.

12 THE CHAIRPERSON: That would be helpful rather than to
13 have an undertaking continuing beyond the process.

14 Would you like that undertaking?

15 MS. BRAITHWAITE: Well, it's a bit of a general question,
16 so I think a response maybe from someone who works in
17 the area would be sufficient, you might be able to get
18 that --

19 MR. GALICZ: My general understanding is our old building
20 guidelines now are equivalent to ASHRAE, is the
21 general understanding that I have.

22 MS. BRAITHWAITE: Okay, so the new ASHRAE standards, if I
23 can call them that, are --

24 MR. GALICZ: Mm-hmm, similar to our old green building
25 requirements.

26 MS. BRAITHWAITE: Okay.

1 MR. GALICZ: Yeah.

2 MS. BRAITHWAITE: So we wouldn't actually, based on that
3 answer, expect any significant reduction in EUIs based
4 on the new ASHRAE standards?

5 MR. GALICZ: Yeah, at this point in time we are
6 attempting to address that through things, as I
7 mentioned earlier, which are thermal bridging, and
8 window treatments to the buildings. We haven't had --
9 we are currently working with one developer under the
10 new ASHRAE standards. So it's all very new day, so we
11 don't really have an understanding of where the energy
12 use intensities will go, at this point in time. And
13 then that is really beyond my area of expertise, so
14 other than generalities, I can't comment any further
15 than that.

16 MS. BRAITHWAITE: Okay.

17 THE CHAIRPERSON: Ms. Braithwaite, are you satisfied with
18 that answer? And would you suggest no undertaking is
19 required?

20 MS. BRAITHWAITE: Yes, I agree.

21 THE CHAIRPERSON: Thank you very much. Thank you for
22 your response.

23 MS. BRAITHWAITE: I am now going to refer to BCOAPO IR
24 9.1, and this was a question relating to the proposed
25 disposal of the existing 2.3 megawatt thermal energy
26 center in 2021. So, my understanding is that it will

1 be taken out of use in 2016, and then sold in 2021.

2 The question was,

3 "Please explain why the existing TEC could
4 not be disposed of until 2021?"

5 And the response from Corix was that,

6 "Corix does not have another location to
7 deploy the existing TEC in its current
8 development forecast until 2020."

9 **Proceeding Time 11:03 a.m. T23**

10 Is there a reason why this unit couldn't be
11 sold to a third party? Is there just no market for
12 these things or --

13 MR. HICKFORD-KULAK: It's Travis Hickford-Kulak, Corix
14 Utilities. There is a market, of which Corix is
15 heavily involved in. There is not a large demand for
16 energy centres of this capacity, and we were fortunate
17 enough to be able to identify in the development of
18 another utility the need for the use of such a sized
19 unit. And our current projection is to repurpose that
20 unit and sell it to that utility.

21 MS. BRAITHWAITE: Oh, I see. So the reference to the
22 current development forecast is not just for Corix's
23 development?

24 MR. HICKFORD-KULAK: It's for the development of another
25 district energy utility that Corix is working on.

26 MS. BRAITHWAITE: Okay.

1 MR. HICKFORD-KULAK: And based on that development
2 forecast, it -- the module is not needed until 2020.

3 MS. BRAITHWAITE: Right. So is there no third-party
4 utility that may be interested in making use of this
5 unit before 2021?

6 MR. HICKFORD-KULAK: I mean, not -- not to our knowledge.
7 Having said that, Corix could explore the possibility
8 of listing the unit for sale. We have had it
9 appraised officially, and the value of it is, you
10 know, much higher than obviously the net book value.
11 So it will provide a net benefit to the ratepayers.

12 MS. WALSH: Can I -- Sarah Walsh from the Commission.
13 I'd like to ask a follow-up question about that.

14 So when you describe the fact that you're
15 planning to redeploy this asset to the Richmond DEU,
16 would you characterize that somewhat as a management
17 decision, in the sense that you could potentially go
18 out to the market and -- if you hadn't had it in mind
19 that this is how you were going to utilize the asset,
20 then you could explore other options of going to the
21 market and trying to sell it?

22 MR. HICKFORD-KULAK: Correct.

23 MS. WALSH: Thank you.

24 MS. BRAITHWAITE: And moving on to the response to BCUC
25 IR 2.1.1, and this was a question that related to the
26 per -- well, the capital costs and operating costs of

1 Corix's preferred alternative, which is the
2 replacement of the existing 2.3 megawatt unit with an
3 8 megawatt unit. In the response that Corix provided
4 to that IR, it identified capital costs which
5 suggested that Corix's preferred solution was more
6 costly as a whole, but less costly on a per-megawatt
7 basis.

8 And my question is, I guess, first of all
9 am I understanding that correctly, that the capital
10 cost savings identified are per-megawatt savings,
11 rather than gross savings, as it were. And if so, is
12 it actually necessary at this time to go to 8
13 megawatts? My understanding is that only 6 megawatts
14 are required at present. And so how does that affect
15 the per-megawatt savings given that we're getting more
16 megawatts than we need?

17 MR. HICKFORD-KULAK: So, it's Travis Hickford-Kulak with
18 Corix. So Corix is actually proposing to only build
19 the 6 megawatt module with an additional -- with the
20 ability to couple in an additional 2 megawatt boiler,
21 in the future, once again, the development and the
22 load has matured further. And that's, you know, the
23 bridging of the equipment so that we're only building
24 to meet the needs of what's now here, in front of us,
25 as opposed to future and then we end up with an
26 overbuilt asset that's not fully utilized.

1 MS. BRAITHWAITE: Sorry, I just want to have a look at
2 the response to that IR.

3 THE CHAIRPERSON: If I may interject. Ms. Braithwaite
4 raises an interesting question. I believe this is the
5 IR 2.1.1 and the capital costs and so on were 121,000
6 versus 173, but you're not building 8, which is your
7 121,000. What would it be for the 6, I guess?

8 **Proceeding Time 11:08 a.m. T24**

9 MR. HICKFORD-KULAK: Yeah, so the 975 is inclusive of 8.
10 So if we were to only build the 6, it would be in the
11 seven or \$800,000 range to begin with, and then
12 eventually we would couple in the other equipment.

13 THE CHAIRPERSON: Thank you very much.

14 MS. WALSH: Sarah Walsh from the Commission. Just to
15 sort of follow up on that question. Basically when
16 you -- in your response to BCUC IR 2.1.1 the \$975,000
17 capital cost is essentially -- sorry, if you refer in
18 conjunction to table 8 of the application, the 975,000
19 is essentially the 1.1 million in 2016 plus the
20 200,000 in 2019 less the salvage of 325,000, correct?

21 MR. HICKFORD-KULAK: Yes.

22 MS. WALSH: So if you weren't, following up with Mr.
23 Braithwaite's questions, if you were not factoring in
24 -- you're only including the 6 megawatt, would you
25 essentially be looking at 1.1 million less the salvage
26 value? So you basically would knock off the \$200,000

1 incurring later.

2 MR. HICKFORD-KULAK: Correct.

3 MS. WALSH: Thank you.

4 THE CHAIRPERSON: Sorry for interjecting, Ms.

5 Braithwaite, but thanks for opening the topic up.

6 MS. BRAITHWAITE: Please fell free anytime.

7 I'm moving on to BCUC IR 11.3, and this was
8 a question about the road access fees and road paving
9 degradation fees paid to the City of Burnaby. And in
10 their response Corix indicates that -- so my
11 understanding is initially the intention was to use
12 SFU right of ways, and then there was a -- but that
13 route was longer. And so there was a decision to
14 engage with the City of Burnaby to use Burnaby right
15 of ways. And in Corix's response, about half way
16 through their response they -- you say,

17 "Because this alternative route was longer
18 and more costly than a route using city
19 roadways, subsequent to the granting of the
20 2011 CPCN Corix initiated discussion with
21 the City highlighting the benefits to
22 UniverCity customers if the distribution
23 pipeline was installed in city roadways."

24 So my question is that, given that using
25 Burnaby City roadways appears to have resulted in
26 significantly higher costs, I'm curious to know how

1 that is a benefit to UniverCity customers?

2 MR. HICKFORD-KULAK: It's Travis Hickford-Kulak. It's

3 resulted in a lower cost. On a capital per trench

4 metre basis, if Corix would have had to have run the

5 distribution piping network around the outside of the

6 UniverCity development, it would have been more

7 expensive than it would have been to run the

8 infrastructure in the City's dedicated roadway and pay

9 their fees.

10 MS. BRAITHEWAITE: Okay, is that because the per metre

11 trenching costs resulted -- were higher than forecast?

12 MR. HICKFORD-KULAK: Correct.

13 MS. BRAITHWAITE: Okay, and so it just sort of -- it

14 happens not by way of planning but just by way of

15 being surprised by higher trenching costs, that it

16 turns out to be beneficial for ratepayers, is that

17 fair?

18 MS. SAFAR: No -- sorry.

19 MR. HICKFORD-KULAK: Go ahead.

20 MS. SAFAR: Ivana Safar. No, this is not correct. The

21 original analysis was made with the original capital

22 costs when we submitted the application to the BCUC.

23 And the trench -- or the route of the original

24 pipeline was longer compared to going through the city

25 roads. And we have the letter to the city, some

26 evidence, at the time the capital costs, original

1 capital costs in the application compared to the costs
2 of the road access agreement the saving was
3 approximately \$150,000, just to go with that. During
4 the implementation process the capital cost to build
5 the infrastructure and the trench metre costs are
6 higher, but original assessment between going along
7 the road versus city road was benefit to the
8 customers.

9 **Proceeding Time 10:58 a.m. T22**

10 MR. BRAITHEWAITE: Okay, thank you. I misunderstood
11 that.

12 Now, I apologize if I am a bit slow, I have
13 some notes from my consultant that I haven't had a
14 chance to get very familiar with yet, they just
15 arrived this morning.

16 Referring again to the table provided in
17 response to BCUC IR 2.1.1, do you regard the capital
18 cost comparison between the 8 megawatt TEC proposed,
19 and the 2.3, plus 2.3 megawatt original plan to be an
20 apples to apples comparison, given that you have
21 reduced the cost of the 8 megawatt proposal by sale of
22 the existing 2.3 megawatt unit? So, in other words,
23 is it true that if you were at the outset comparing
24 the two alternatives to decide between the two, that
25 you would not do such a reduction and that that would
26 be a more accurate cost comparison?

1 MR. HICKFORD-KULAK: This is Travis Hickford-Kulak with
2 Corix. We've made the evaluation based on the
3 information we have today. It wouldn't be reasonable
4 for us to speculate what might happen. We have dealt
5 with the situation that we are currently faced with,
6 and we've used that information that is available to
7 us to make that assessment.

8 MS. BRAITHWAITE: Right, so is your view that it's more
9 accurate to look at the capital cost of the 8 megawatt
10 plant minus the amount you get from the sale of the
11 existing 2.3 megawatt plant?

12 MR. HICKFORD-KULAK: Yes. The numbers should be compared
13 inclusive of the reduction of the 2.3 megawatt plant.
14 Because that is what we have.

15 MS. BRAITHWAITE: Okay, I understand the response.

16 MS. WALSH: Sarah Walsh from the Commission. Just to
17 follow up with that. Possibly would it -- given that
18 you don't know -- you know what the appraised value of
19 the asset is, but that you don't know -- that you
20 aren't planning currently to dispose of it, it
21 hopefully will be disposed of in 2020, that really an
22 apples to apples comparison might be instead of
23 reducing it by the sales proceeds, but reducing it by
24 the net book value of the asset today? I mean, it's
25 kind of splitting hairs, but --

26 MR. HICKFORD-KULAK: Yeah, I mean --

1 MS. WALSH: But that would probably be a bit more of an
2 apples to apples comparison.

3 MR. LIESCH: David Liesch, Corix. This is -- what we've
4 got on the page there is our actual plan, and we are
5 looking at a business case. We look at incremental
6 cash flows. So, on the one hand, you've got the cost
7 outflow for the two, times 2.3 megawatts. On the
8 other side you've got the cash outflow for the 8,
9 minus the cash inflow for the expected sale proceeds,
10 based on the appraisal. Best information we have.

11 MS. WALSH: Thank you.

12 MS. BRAITHWAITE: With respect to BCUC IR 4.1, which has
13 to do with the revised 2009-2010 feasibility study
14 external consultant costs, did Corix have an
15 opportunity to provide the increased cost estimates to
16 the BCUC prior to the hearing approving the original
17 CPCN?

18 MR. HICKFORD-KULAK: No, we did not. Travis Hickford-
19 Kulak, Corix Utilities.

20 **Proceeding Time 11:17 a.m. T26**

21 MS. BRAITHWAITE: Referring to BCUC IR 4.7, Corix has
22 provided a table in response to the question. And my
23 question is, why do the project management costs spike
24 up in 2014?

25 MR. HICKFORD-KULAK: So, the reason -- Travis Hickford-
26 Kulak, Corix Utilities. The reason that the project

1 management number has -- is substantially larger than
2 the previous years is 2014 was the year when Corix
3 spent a lot of time analyzing where we were currently
4 at with the project. And also started with the
5 preparation work that went into this application.

6 MS. BRAITHWAITE: Okay.

7 MS. WALSH: Sarah Walsh from the Commission. Just to
8 follow up on that response. Based on when -- Travis,
9 based on one of your responses earlier, I was under
10 the impression that the project management and
11 construction management costs were based on a
12 percentage of capital.

13 MR. HICKFORD-KULAK: They're forecasted based on a
14 percentage of capital. These are actual numbers that
15 are represented by job sheets that Corix tracks
16 internally.

17 MS. WALSH: So the forecast, construction management,
18 project management, is based on a percentage of
19 capital, but the actual costs are based on timesheets?

20 MR. HICKFORD-KULAK: They're tracked based on timesheets.

21 MS. WALSH: Okay, thank you.

22 MR. HICKFORD-KULAK: Yeah.

23 MS. BRAITHWAITE: Referring to BCUC 6.5 and 6.6, which
24 relate to insurance. First of all, can Corix confirm
25 that it has in the past experienced insurance
26 increases of 5 to 10 percent over an extended period

1 of time? Say, 10 years? Is that actually a normal
2 insurance rate increase?

3 MR. WIGINTON: Ian Wiginton, Corix. I'm not sure we can
4 confirm that that has been historically what has
5 occurred. But I think the insurance industry over the
6 last few years has experienced substantial increases
7 and expectations are that types of events and stuff
8 that we see throughout the world are not going to
9 decrease over the next few years. So we're just
10 taking the information that we're providing here,
11 based on what we've been advised by our insurance
12 brokers, so.

13 MS. BRAITHWAITE: Okay. And in 6.6, when you refer to
14 replacement value or, as the Commission refers --
15 initially refers to replacement value in their
16 question, if there is a loss associated with insured
17 plant, does the insurance cover the cost of the brand-
18 new asset? Or does it only cover the net book value
19 of the asset covered?

20 **Proceeding Time 11:22 a.m. T27**

21 MR. WIGINTON: It would cover the replacement cost of
22 that asset, the new -- the value of putting a new
23 asset in.

24 MS. BRAITHWAITE: Okay.

25 THE CHAIRPERSON: Ms. Braithwaite, if I may interject --
26 Richard Revel. So your insurance isn't adjusted each

1 year for the depreciated value of the asset, is that
2 the way I understand it? So you keep your insurance
3 at the peak level value of the full new replacement
4 value?

5 MR. HICKFORD-KULAK: Yeah, I believe -- I'm sorry.
6 Travis Hickford-Kulak with Corix Utilities. We
7 provide our insurance people with regular annual
8 updates regarding the capital cost invested, not the
9 depreciated value. So therefore it's our
10 understanding that it's based on the acquisition value
11 of the asset.

12 THE CHAIRPERSON: Thank you very much. Once again, Ms.
13 Braithwaite, my apologies.

14 MS. BRAITHWAITE: Those are all my questions, thank you.

15 THE CHAIRPERSON: Thank you.

16 MS. WALSH: Well, Sarah Walsh with the Commission. I
17 guess I'll continue on with my questions, then.

18 I actually just had a brief clarifying
19 question from Exhibit B-7, which was Corix's responses
20 to the advance question. It's under project
21 development costs on page 2. And just with regards to
22 the last line item in the table that you provided,
23 titled "Development costs (EXT)", could you just
24 provide a bit more of a description about what this
25 amount is related to?

26 MR. HICKFORD-KULAK: Sorry, regarding the development

1 costs, with the parentheses around "EXT", this is
2 external development costs. So it's associated with
3 engineering costs that are external, legal costs that
4 could be incurred externally. Anything that's really
5 not part of the in-house resources that Corix has.

6 MS. WALSH: So given the fact that it's \$6,000 annually,
7 I'm guessing this is just sort of a placeholder
8 amount, of an assumption of external costs you're
9 going to incur annually?

10 MR. HICKFORD-KULAK: Correct. If we have to retain the
11 services of external legal counsel for the review of
12 staff rights of way, et cetera, that's a placeholder
13 for that cost.

14 MS. WALSH: Okay, thank you. Now, I just want to turn to
15 page 8 of the application, where you describe the
16 approval sought. And I probably don't need to refer
17 to that page specifically, but I notice that you
18 referenced section 56 of the *Utilities Commission Act*
19 as part of the approval sought. Would you please
20 clarify which of the specific approvals that section
21 56 is intended to cover? I believe that the
22 description of section 56 of the *UCA* is depreciation
23 accounts and funds. But it's not an approval that we
24 commonly see.

25 **Proceeding Time 11:26 a.m. T28**

26 MR. WIGINTON: Ian Wiginton, Corix. We may have

1 inadvertently included that section in the approval
2 sought.

3 MS. WALSH: Okay. So the -- to clarify, we could
4 probably strike that approval from the order?

5 MR. WIGINTON: Yes.

6 MS. WALSH: Thank you, Ian. Okay.

7 Okay, my next group of questions are going
8 to be about salvage values. So to start off with, I
9 just want to ask some clarifying questions about the
10 calculation of the salvage value. As we discussed
11 before, you've provided an appraised value for the 2.3
12 megawatt TEC of \$325,000. Turning to response to BCUC
13 IR 5.5, you provided Universal Appraisal's definition
14 of value and methodology for determining plant value.

15 I just want to -- I'll just state part of
16 that definition which I'm going to be referring to.
17 "The basis of this valuation relates to the physical
18 property to be appraised on an as-is, where-is basis.
19 This approach to value considers the return that might
20 be expected when the equipment is offered for sale and
21 sold, in an orderly fashion, within an economical time
22 frame which is estimated to be three months."

23 Could you clarify, based on -- particularly
24 that last part of the sentence about the economical
25 time frame of three months, whether the 325,000 is
26 meant to represent the value that you would receive

1 for the asset if sold in present day, or if it was
2 sold in 2020?

3 MR. HICKFORD-KULAK: Travis Hickford-Kulak, Corix
4 Utilities. It is Corix's belief that the asset itself
5 may actually increase over time. It's not like the
6 purchase of a vehicle that gets a lot of wear, tear,
7 and depreciates extensively over a short timeframe.
8 This equipment will be removed from the system and
9 laid up in a prudent fashion, and preserved for the
10 future, and therefore it is Corix's reasonable
11 understanding that the asset would maintain its
12 current value.

13 MS. WALSH: Sarah Walsh. So, just to clarify. Basically
14 the 325,000, if you were to sell the asset today, you
15 would be expecting to receive proceeds of 325,000 and
16 you simply are assuming that in five years from now it
17 will have been preserved and therefore you would still
18 receive 325,000.

19 MR. HICKFORD-KULAK: Correct. We've actually forecast it
20 that way in the development of the other utility as
21 well.

22 MS. WALSH: Okay, thank you.

23 THE CHAIRPERSON: May I -- Richard Revel. May I please
24 interject. I understood to have heard you say, Mr.
25 Hickford-Kulak, that in fact it's an appreciating
26 item. Would you anticipate -- what appreciation would

1 storing that unit.

2 MR. SMITH: And the maintenance part of the question?

3 MR. HICKFORD-KULAK: Once the plant is laid up, there is
4 essentially no maintenance to be done.

5 So when the plant is put back into service
6 in a different utility setting, things like pumps will
7 actually be replaced as a part of that build into the
8 new utility. Some of the equipment was specifically
9 sized for the system we have at UniverCity and we've
10 made allowance in our other projections in the other
11 utility to deal with those items when that equipment
12 is deployed to that utility.

13 MS. WALSH: I think I know the answer for that -- sorry.
14 Sarah Walsh. Just going to ask a clarifying question
15 about the value.

16 The \$325,000, that -- is that the gross
17 sales proceeds of the asset? Like, the cash proceeds
18 of selling it? I guess -- does that -- is that
19 reduced by -- I'm assuming it's not, for example,
20 reduced by the net book value of the asset being sold.

21 MR. HICKFORD-KULAK: No. No.

22 MS. WALSH: And does that factor in any one-time costs of
23 selling the asset?

24 MR. HICKFORD-KULAK: Any costs associated with selling
25 that asset will be absorbed by the utility purchasing
26 the asset.

1 MS. WALSH: Right.

2 MS. DOMINGO: It's Yolanda Domingo here. Earlier you
3 mentioned there is a one-time cost to remove that
4 asset and put it into storage. Now, that's the piece
5 of the question I think I'm missing. So is that net
6 of the 325?

7 MR. HICKFORD-KULAK: No. We would -- sorry, Travis
8 Hickford-Kulak. The cost would not affect ratepayers.
9 That's a cost that Corix Energy -- department would
10 assume.

11 MS. DOMINGO: Thank you.

12 MS. WALSH: Sarah Walsh speaking again. Continuing on
13 with the salvage value. I'm just going to explore
14 sort of along the topic of the idea used in usefulness
15 of the asset. In response -- turning to response to
16 BCUC IR 5.8.1, you provided a response as to why it
17 would be appropriate to continue to recover the costs
18 of this asset when it's no longer being used by
19 UniverCity ratepayers. Basically saying that your
20 proposal results in a net benefit to ratepayers and as
21 such you believe it would be appropriate to leave the
22 asset in the rate base.

23 And then in your responses to BCUC IR 5.1
24 and 5.2, you've stated that you currently project that
25 the asset would be redeployed in 2020. Correct?
26 Right.

1 MR. HICKFORD-KULAK: Yes.

2 MS. WALSH: And to follow up on that, I'm going to assume
3 based on that response that there aren't any really
4 assurances that have been provided from the Richmond
5 DEU that you will be redeploying the asset?

6 MR. HICKFORD-KULAK: Not definitively, but it is a part
7 of their overall capital plan that Corix manages on
8 their behalf, and they are aware of it, and it has
9 been accepted by their board of directors. So as it
10 currently stands now, it is a known item.

11 MS. WALSH: But there is no signed agreement or something
12 that formal?

13 MR. HICKFORD-KULAK: No.

14 MS. WALSH: And if Corix operated under the assumption
15 that it was not able to redeploy the asset and
16 therefore there was no expected net benefit from the
17 redeployment of the asset, would your response --
18 would you still maintain your response that you
19 believe it's appropriate to leave the asset in rate
20 base?

21 MR. HICKFORD-KULAK: No, we would remove the asset from
22 rate base.

23 MS. WALSH: Just continuing in this vein of questions, in
24 response to BCUC IR5.7, regarding whether or not the
25 asset should be classified as no longer used and
26 useful, once it's replaced by the 8 megawatt TEC, you

1 stated that in the context of a mature utility the
2 asset would not typically be classified as used and
3 useful in the case of UniverCity. Corix believes
4 special consideration should be given in determining
5 treatment of the asset given the uncertainty
6 surrounding build out, energy demand, and the economic
7 benefits.

8 If the Commission determines that the asset
9 must be removed from rate base at the time of -- if
10 the asset -- if the Commission determined that the
11 asset could not remain until redeployment, would that
12 change Corix's preferred -- or proposed alternative to
13 proceed with the 8 megawatt TEC?

14 MR. HICKFORD-KULAK: No.

15 THE CHAIRPERSON: Is there any elaboration you'd like to
16 make on your --

17 MR. HICKFORD-KULAK: You heard me, eh, Richard?

18 So, we were just discussing that if Corix
19 was directed to remove the asset from rate base, that
20 Corix would simply remove it based on its current net
21 book value at the time it was directed to remove that
22 asset and that Corix would retain it on its own
23 internal balance sheet. And when we were able to
24 either transfer or sell that asset, that Corix would
25 see the net benefit from selling that asset as opposed
26 to the UniverCity ratepayers.

1 THE CHAIRPERSON: And just to confirm, that net book
2 value you're referring to is 325,000?

3 MR. HICKFORD-KULAK: No, it's \$207,000 as of April 2016.

4 THE CHAIRPERSON: Thank you.

5 **Proceeding Time 11:41 a.m. T31**

6 MS. WALSH: Thank you for that elaboration. That sort of
7 leads into the next question that I was going to ask.
8 When looking at the treatment of removing -- say that
9 we follow along the scenario where you remove the
10 asset from rate base. Looking at it from a regulatory
11 accounting treatment perspective, would the most
12 appropriate way of treating the asset once removed
13 would be possibly to place it into a deferral account?
14 Remove it from rate base and place it in a deferral
15 account until it is disposed of?

16 I'm wondering under the uniform system of
17 accounts, and this might be too technical to ask right
18 in this moment, but I'm wondering if the uniform
19 system of accounts contemplates a situation like this,
20 wherein you would remove it from rate base and it
21 would be sort of placed in a holding account of sorts.

22 MR. LIESCH: I'm not familiar with the actual accounting
23 codes of the uniform system of accounts, but on the
24 principle I think makes sense in this situation given
25 we've got -- it's a temporary energy centre. We've
26 got a build up situation of 10 years, but that type of

1 asset lasts 20. We know we're going to be retiring it
2 before its end of life. And given the overall benefit
3 it's provided to the development, we think that's
4 appropriate treatment.

5 MS. WALSH: From financial reporting perspectives, since
6 it will be re -- it would be removed from rate base,
7 would you -- I'm presuming that you wouldn't record it
8 as a disposal at the time of removal or would you for
9 financial accounting purposes? I guess I'm wondering
10 if that's, in a sense, the purpose of having that sort
11 of regulatory deferral account, so that it -- I guess
12 I am wondering if from financial accounting purposes
13 if you would actually record this disposal and remove
14 it from rate base?

15 MR. LIESCH: I would have to go to our accounting
16 department to find out what they're doing for
17 financial accounting.

18 MS. DOMINGO: It's Yolanda Domingo. You may want to
19 consider or think about, under the uniform system of
20 accounts there is an account code called assets held
21 for future use. And what I understand is that it is
22 an item that is held offside and it is an item that is
23 held out of rate base. And I don't know if you're
24 prepared to answer that. I guess an option is, you
25 know, we could do the deferral account treatment,
26 which is what Sarah alluded to, or another alternative

1 possibly is to move it into the assets held for future
2 use account, which is outside of rate base, in which
3 customers would not be paying for it. And that can
4 then be treated separately until such time that the
5 asset is actually disposed of or sold to the Richmond
6 Oval. And you might want to just take that away and
7 in your final submission you can let us know what your
8 position is on that?

9 MR. LIESCH: We're going to send that off to our
10 accounting department and try to get an answer in the
11 next hour.

12 MS. WALSH: Thank you. One last question related to
13 this. Section 52 of the UCA covers the Commission
14 approval related to disposing of assets. In the
15 future, should Corix redeploy the asset, does Corix
16 believe that there would be a requirement for them to
17 apply to the Commission for approval? Or would the
18 disposal -- or does Corix view that by having to
19 replace the asset at the time that the 8 megawatt TEC
20 came in, that that would be the disposal?

21 **Proceeding Time 11:46 a.m. T32**

22 I guess I want to follow up on what Travis
23 had said about the proceeds would then go to Corix's
24 sharehold -- or Corix. And just to wonder if Corix
25 has contemplated whether they would need Commission
26 approval in order to do that? Or if that is just not

1 something that has been contemplated yet?

2 MR. WIGINTON: Ian Wiginton, Corix. I don't know that we
3 have contemplated that, Sarah, but looking at the
4 section 52 of the Act, it would appear that we would
5 require Commission approval. So, I think we are
6 prepared to say "yes," we would come for Commission
7 approval, should that course unfold.

8 MS. WALSH: Okay, thank you. Just a few more questions,
9 but off this topic. Just a few questions about fixed
10 operating costs.

11 In response to BCUC IR 6.1, you provided
12 the actual fixed operating cost for 2012 through 2014.
13 Could you please explain why the corporate overhead
14 and support costs for 2014 were so significantly over
15 originally forecast? I believe you provided an amount
16 of \$260,663. A detailed breakdown isn't necessary,
17 just a general idea, or description.

18 MR. HICKFORD-KULAK: Travis Hickford-Kulak for Corix
19 Utilities. The \$260,000 that you see listed as
20 corporate overhead and support is a number that was
21 applied in 2014 using the Massachusetts model, to
22 calculate what Corix's overhead was as a corporation
23 in general. And this was the value that was
24 calculated to be applied to the UniverCity NUS
25 project. We note that it exceeds the approved \$50,000
26 that was approved under the order in 2011, and Corix

1 has since moved to a new methodology of tracking
2 corporate overhead and support services through
3 detailed timecard allotment, and future applications
4 of that value will be done in direct consultation with
5 timecards and job sheets.

6 MS. WALSH: Sarah Walsh from the Commission. But to
7 clarify, though, you are still proposing to recover
8 the \$260,000 -- it's in the RDDA and you're are
9 proposing to recover it from UniverCity ratepayers, is
10 that correct?

11 MR. LIESCH: David Liesch, Corix. I believe our
12 recalculation of the RDDA, we made a few adjustments,
13 and we changed that to \$50,000.

14 MS. WALSH: Okay. Thank you. For 2015, you -- Table 10
15 of the fixed operating costs on page 21 of the
16 application, you have provided your revised forecast
17 for corporate overhead and support, which is 50,500
18 and then proposing to escalate it accordingly going
19 forward. I am just wondering if you have an idea of
20 what the projected corporate overhead and support
21 costs are for 2015 based on as many -- based on actual
22 data so far?

23 **Proceeding Time 11:51 a.m. T33**

24 MR. HICKFORD-KULAK: It's Travis Hickford-Kulak with
25 Corix Utilities. So we provided in a response to one
26 of the IRs a detailed breakdown of that \$50,000 and we

1 feel that that is a reasonable forecast of what the
2 associated corporate overhead and support costs would
3 be, and that's where that original \$50,000 came from.
4 And then there was the utility management piece that
5 was layered on top of that, and that's associated with
6 the general direct management of that utility on an
7 ongoing basis.

8 MS. WALSH: I guess -- well, following along with that
9 response, Sarah Walsh speaking, currently based on my
10 understanding of the rate design for UniverCity based
11 on the 2010 CPCN approval is that -- and please
12 correct me if I'm wrong, but in essence through the
13 RDDA it's really the actual costs that are being
14 recorded in the RDDA for future recovery from
15 ratepayers? I guess -- well, maybe I'll continue on
16 with where I'm going with this first.

17 For instance, in the UBC Neighbourhood
18 District Energy System, the Commission raised in the
19 original CPCN decision the part of the TES Guidelines
20 that contemplates a portion of the operating costs,
21 that contemplates the utility designating certain
22 operating costs as controllable and certain as non-
23 controllable, with the idea being that controllable
24 costs would be costed the utility forecast and then
25 lived with those costs and the actual costs would not
26 then go into the RDDA. But I didn't see any sort of

1 discussion of that in 2010 and that's mostly likely
2 because, for example, the TES Guidelines weren't in
3 existence at that time.

4 I'm wondering if Corix -- I'm wondering
5 what your thoughts are on adopting a similar approach
6 that is being done in UBC where certain of these fixed
7 operating costs would be classified as controllable
8 and therefore you would not record the variances
9 between forecasts and actual in the RDDA.

10 MR. HICKFORD-KULAK: Yes. Travis Hickford-Kulak of Corix
11 Utilities.

12 MS. WALSH: If possible, it might be helpful if you look,
13 for example, at the UBC rate, the 2015 UBC Final Rates
14 Application and possibly if you found that reasonable,
15 proposed a similar characterization between
16 controllable and non-controllable costs in your final
17 argument.

18 And just one more question and this sort of
19 goes to what Travis was talking about, the
20 Massachusetts model. You had provided details in BCUC
21 IR 6.10 and 6.10.1 about these operational management
22 support costs which were characterized by management
23 support of courses Energy Western Canada Division.
24 Based on, Travis, on your previous response, I'm
25 trying to get an understanding of where these costs
26 are being allocated from to UniverCity. For example,

1 if you look at Corix's corporate structure, are the
2 costs being allocated from CMUS to the District, to
3 say UniverCity as an example, or are these costs
4 coming from CMUS's parent, for example, and then being
5 distributed in some way?

6 MR. HICKFORD-KULAK: It's Travis Hickford-Kulak of Corix
7 Utilities. The costs are recorded in CUI, being kind
8 of the mother ship, which is Corix Utilities
9 Incorporated, and they are being tracked and invoiced
10 into CMUS and in particular the Department associated
11 from an accounting perspective with the UniverCity
12 NUS. So it's all detailed and filtered from above
13 into the actual general ledger.

14 **Proceeding Time 11:56 a.m. T34**

15 MS. WALSH: And is this treatment, does Corix have a --
16 some sort of a formalized transfer pricing policy
17 that's sort of dictating how these costs are flowing?

18 MR. HICKFORD-KULAK: We do. Sorry, it's Travis Hickford-
19 Kulak with Corix Utilities. Sarah, we've provided the
20 rates in attachment 2 in response to the IRS, the
21 Commission's IRs. It's related to IR 6-7, 6-8, 6-10
22 and 6-11.

23 MS. WALSH: Right, the hours and the allocations.

24 MR. HICKFORD-KULAK: Yeah, the costs under the hours, it
25 would be the column B.

26 MS. WALSH: Right.

1 MR. HICKFORD-KULAK: Those are the costs per hour
2 associated with each resource.

3 MS. WALSH: Right. Yeah, thank you. I was trying -- I
4 was just wanting to clarify sort of the flow of the
5 costs themselves. For example, at the CMUS level, is
6 it accurate to say that that's where you are incurring
7 your financial -- financial accounting costs like --
8 you have a financial accounting department and they
9 are doing work for the various district energy
10 systems. Is that a correct characterization?

11 MR. HICKFORD-KULAK: I think -- I believe there's only
12 two or three actual CMUS employees.

13 MS. WALSH: Okay.

14 MR. HICKFORD-KULAK: Most employees are employees of
15 either Corix Utilities Incorporated or Corix
16 Infrastructure.

17 MS. WALSH: Okay. Okay, thank you, that's what -- that's
18 the clarification I was looking for.

19 MR. HICKFORD-KULAK: Yes.

20 MS. WALSH: Thank you.

21 MS. SANGHERA: I just have a couple of questions. So
22 this is just to get a little bit more insight on why
23 Corix is requesting for a CPCN. In response, Corix's
24 response to Commission IR question number 1.2, you
25 guys provided an interpretation of the TES guidelines
26 ratio of the capital cost of the planned extension to

1 the initial capital cost of the TES, and based on that
2 interpretation you have calculated a resulting ratio
3 of 1.26, which is why we're assuming Corix is
4 requesting a CPCN.

5 However, we just want to get your take on
6 if the Panel rules otherwise, meaning the Panel rules
7 that a CPCN is not required, how would Corix respond
8 or proceed?

9 MR. WIGINTON: Again, Ian Wiginton, Corix. Again, we've
10 interpreted the guidelines this way. They are
11 guidelines, we understand that, and they're in a
12 process of I guess being -- through this application
13 and others, being vetted, and if it is the
14 Commission's determination that we do not need to come
15 in for CPCN, I guess we're here anyway with a rate
16 application, a revenue application and we would look
17 for, I guess, advice from the Commission as to what we
18 should be applying for.

19 We hadn't -- we feel there's a reason to be
20 here anyway, but we're open to the Commission's
21 determination on that.

22 THE CHAIRPERSON: May I just elaborate. Richard Revel.
23 What I'm hearing you say, Mr. Wiginton, is it wouldn't
24 trouble you if you were told that you didn't require a
25 CPCN, as long as your rates were dealt with, is that
26 correct?

1 MR. WIGINTON: That's correct.

2 THE CHAIRPERSON: Thank you.

3 MS. SANGHERA: Maybe I will move on, unless Sarah has a
4 question, she can come back.

5 So this is going back to the cost per
6 trench metre. So you mentioned that the actual cost
7 of going to the City of Burnaby was \$2,800 per trench
8 metre, whereas the forecast cost was \$1300 per trench
9 metre for going to the SFU statutory rights of way.
10 So my question relates to the \$2,800 per trench metre.

11 Of that amount, what is approximately the
12 cost related to specifically moving towards the City
13 of Burnaby roadways, or utilizing the City of Burnaby
14 roadways? So I'm talking about like permits or
15 delays, re-design efforts, traffic control,
16 inspections, road disturbance, repair, et cetera.

17 **Proceeding Time 12:02 p.m. T35**

18 MR. HICKFORD-KULAK: Travis Hickford-Kulak with Corix.
19 Would you want that expressed in a dollar per trench
20 meter or in a total dollar value?

21 MS. SANGHERA: Dollar per trench meter.

22 MR. HICKFORD-KULAK: Dollar per trench meter. We'd need
23 to take that one away and get back to you, and we
24 would be able to do that in the next hour or so.

25 **Information Request**

26 MS. SANGHERA: Okay. So in the same line, so, and you're

1 proposing to use the \$2,800 per trench metre going
2 forward, has Corix done an analysis to compare
3 utilizing the SFU statutory rights of way compared to
4 the City of Burnaby roadways? If so, please provide
5 more info. If not, then why not?

6 MR. HICKFORD-KULAK: Sorry, could -- it's Travis
7 Hickford-Kulak. Could you please clarify the
8 question?

9 MS. SANGHERA: Yeah. So it's analysis to compare
10 utilizing the SFU statutory rights of way compared to
11 the City of Burnaby roadways. So, when you propose
12 that \$2,800 trench per metre cost, were those two
13 compared? Those two options compared.

14 MR. SMITH: Todd Smith here. Have you gone back to look
15 at the original assumptions that the City of Burnaby
16 roadways would be cheaper? As opposed to what you had
17 originally proposed to do in the original CPCN, which
18 was to use the statutory rights of way of the SFU.
19 Have you gone back -- when you're looking at going
20 forward now and spending, you know -- using the \$2,800
21 per foot, have you gone back to see were those
22 assumptions correct before, when we decided -- when
23 you decided to go to the City of Burnaby roadways, and
24 potentially, you know, what assessment have you done
25 there, and can you show that?

26 MR. HICKFORD-KULAK: So, sorry. It's Travis Hickford-

1 Kulak. So, Todd, are you asking about what was the
2 difference, like, take away the whole Burnaby piece
3 and just kind of do like an apples-to-apples
4 comparison on the breakdown of the different
5 components of what made up that trench metre cost, in
6 comparison? Or am I --

7 MR. SMITH: Well, the \$2800 represents a significant
8 higher cost than what you'd forecast.

9 MR. HICKFORD-KULAK: Correct.

10 MR. SMITH: And in using the SFU statutory rights of way.
11 Have you -- can you explain why you wouldn't consider,
12 or have you gone back to consider possibly shifting
13 your strategy from using Burnaby rights of way now to
14 using this statutory rights of way, at least doing an
15 analysis of the cost difference to see if you can
16 improve that \$2800 per foot?

17 MR. HICKFORD-KULAK: Okay. So, I understand your
18 question. So, the \$2800, of that \$2800 the dollar per
19 trench metre associated with the Burnaby fees that we
20 had to pay was a small portion of the overall cost.
21 The difference between it -- and I'll dig up the
22 number here in a moment, but for argument's sake let's
23 say it's \$100 per trench metre. If we subtract that,
24 we're still left with about \$2700 per trench metre,
25 versus the \$1300 that we assumed under the original
26 application. The 27 is -- represents the actual cost

1 when we -- when Corix went out to tender, when we
2 bought all the materials, when we found out we had to
3 haul all of the excavated materials off of site, when
4 we had to deal with inclement weather conditions when
5 we were building the first phase of the NUS, and
6 that's what that \$2700 would represent. So we have
7 analyzed that dollar per trench metre cost.

8 And we feel, moving forward, it's a very
9 prudent method to use that historical cost to date to
10 forecast what the future extensions may cost.

11 **Proceeding Time 12:06 p.m. T36**

12 I would like to add further that it is
13 Corix's experience in other locations, such as UBC and
14 Richmond, that we experienced costs in the similar
15 range. That seems to be kind of the standard in the
16 Lower Mainland of British Columbia.

17 MR. SMITH: And I guess those similar costs would be for
18 using roadways or for using other statutory right of
19 ways?

20 MR. HICKFORD-KULAK: It's such a small component of the
21 overall cost per trench metre, yes we had to pay, you
22 know, what seems like a huge fee to the City of
23 Burnaby, and I think all in all it was 150 some off
24 thousand dollars. But in the bigger picture it's the
25 actual assumed cost of installation that was way off.
26 I mean, from a civil perspective alone, I think our

1 original estimations under the original CPCN
2 application was in the order of potentially 700, \$800
3 per trench metre. It's actually on average, between
4 all of the utilities, it's anywhere between 13 and 15
5 hundred dollars per trench metre from a civil
6 perspective. And then the mechanical can fluctuate as
7 well.

8 THE CHAIRPERSON: Richard Revel. I note it's now ten
9 minutes past twelve, and perhaps at this point I might
10 take a poll to first of all see how much longer Staff
11 anticipates needing for their questions, and
12 concerning issues with regards to the requested
13 undertaking, whether they have anything to say. And
14 then based on that we might decided whether we should
15 take a break for lunch now and resume questioning
16 after or whether we would like to see the end of the
17 questioning.

18 Staff, have you any comments on my
19 question?

20 MR. SMITH: I would think that we could finish up in less
21 than five minutes.

22 MS. WALSH: And then I've got just a minute, less than a
23 minute.

24 MR. SMITH: So we should be able to wrap up by quarter
25 after twelve, with questions.

26 THE CHAIRPERSON: Six minutes is a fairly precise number.

1 I'm impressed. Somebody can set the stopwatch.

2 I think we all agree that we should proceed
3 to the end of the questions.

4 MR. SMITH: So continuing -- it's Todd Smith. Continuing
5 with that line the costs then, you're saying, are
6 relatively small. You've mentioned a number of \$100
7 per trench metre, related to using Burnaby roadways
8 versus using statutory right of way. And I guess
9 built into that approximation would be the idea that
10 some of those other costs, other than the permit, the
11 \$150,000 permit, of say removing material, which I
12 think you've identified as being another significant
13 unexpected cost in the cost per trench metre, would
14 those -- would that be required if using the statutory
15 right of way as well or was that a City of Burnaby
16 requirement?

17 MR. HICKFORD-KULAK: No, the City of Burnaby was more, we
18 just had to pay the fees. They didn't really require
19 any specific tasks of Corix other than a bonding
20 deposit. So, no there wouldn't be -- there's really
21 no substantial difference.

22 It's also important to note that all of the
23 infrastructure required to be in the City of Burnaby
24 dedicated roadways has already been built and is
25 installed. And there will be no further extensions
26 within the UniverCity community under our current

1 project plan in any Burnaby dedicated roadways. That
2 infrastructure has been 100 percent installed.

3 MR. SMITH: So then what does the \$2800 per trench metre
4 --

5 MR. HICKFORD-KULAK: Those are for other extensions that
6 will reside within -- SRWs that are granted by Simon
7 Fraser University.

8 **Proceeding Time 12:11 p.m. T37**

9 MR. SMITH: Okay. So there's no more road work --

10 MR. HICKFORD-KULAK: There is a ton of road work that has
11 to go in, just not in Burnaby's right of ways. But
12 there is -- yeah, there is -- so, SFU, in its
13 entirety, and more particularly UniverCity is a very
14 confusing myriad of roadways and who owns what, and,
15 you know, different breaks within the actual roadways
16 themselves. So, basically everything from a road
17 called UniverCity High Street all the way up a road
18 referred to as UniverCity Crescent is all a dedicated
19 roadway to the City of Burnaby. Eventually it will be
20 turned over to Burnaby and they will operate that road
21 system. Everything south of that on the mountain is
22 owned and will remain in the operation of Simon Fraser
23 University.

24 So, we alluded to the complexities
25 regarding SRW registrations, et cetera. So we ended
26 up having to deal and negotiate with two different

1 entities. So we -- for a portion of our piping
2 system, we had to negotiate with the City of Burnaby
3 and negotiate that road access agreement and pay those
4 fees. And for all of the other pipeline, we have to
5 negotiate a right of way with Simon Fraser University
6 and have that actually granted to us, so we can
7 install our infrastructure, and then yet again if
8 there is piping on private property, we then have to
9 negotiate with either the SFU Community Trust or the
10 individual developers under their ground lease.

11 So it's a very complex, convoluted system
12 that we have to kind of wade our way through and there
13 is still infrastructure that has to be installed, and
14 we're currently working with Simon Fraser University,
15 as well as the SFU Community Trust to kind of
16 preemptively get all of those registered, so we don't
17 have to deal with this. And then we would be able to
18 potentially reduce what our forecast looks like,
19 pertaining to that component of the \$2800 per trench
20 metre.

21 MR. SMITH: Okay.

22 MS. WALSH: Sarah Walsh from the Commission. Just wanted
23 to -- after further, further reflection, I would like
24 to retract the request regarding the controllable and
25 uncontrollable cost classification. That is not
26 required as part of the final argument.

1 MR. HICKFORD-KULAK: Thank you.

2 THE CHAIRPERSON: Are there further questions from staff?

3 Well, they over-estimated the time.

4 Anyway, I'd like to end the questioning
5 session by saying I'd very much like to thank the B.C.
6 Sustainable Energy Association and the Sierra Club, as
7 well as the BCOAPO and Staff, for the questioning they
8 have asked you. And I'd also like to thank Corix very
9 much for the candour you've offered in answering those
10 questions. And to wrap that up, I'll observe there is
11 no cups of hemlock are necessary in this case.

12 At 12:15 now, I'd like a poll to see how
13 the group would wish to proceed. We could take a
14 lunch break now, as an option, and then either go
15 directly into argument, if that's -- is that your
16 preference? Would -- do people have any expressions?
17 And also how long would you need to prepare your
18 argument, and have a lunch at the same time.

19 We could take a break for you to discuss it
20 if you like.

21 MS. TUCK: Ann Tuck for Corix. We would propose -- oh,
22 an hour? We would propose a short lunch. We don't
23 need long to prepare our final submissions, they would
24 be brief. So we propose half an hour for lunch, and
25 then back for final submissions.

26 THE CHAIRPERSON: So you can get your submission and have

1 lunch at that time?

2 MS. TUCK: We can.

3 THE CHAIRPERSON: Is that agreeable to everybody, or
4 would anybody like a longer period? Sorry?

5 MR. ANDREWS: It's agreeable.

6 THE CHAIRPERSON: It's agreeable? Are there any
7 objections? Going once.

8 In that case, it's now 12:15, and we'll
9 reconvene at ten minutes to one.

10 **(PROCEEDINGS ADJOURNED AT 12:15 P.M.)**

11 **(PROCEEDINGS RESUMED AT 12:54 P.M.) T38**

12 THE CHAIRPERSON: Well, given the promptness of
13 everybody, congratulations. I take it you are not
14 overfed in the intervening half hour.

15 So, that being the case, we will now resume
16 the proceeding, and having survived the Socratic test,
17 let's see now if you can pull the valid syllogism's
18 out of Plato's 260 odd and ignore the invalid logics
19 with false premises and false conclusions. With that,
20 I invite Corix to give their final argument.

21 MS. TUCK: Thank you, Ann Tuck for Corix. We had two
22 outstanding questions that we'd like to address first,
23 before final submissions. The first one was, I will
24 actually turn over to Travis to deal with the dollar
25 per trench metre issue.

26 MR. HICKFORD-KULAK: Travis Hickford-Kulak for Corix

1 Utilities. Todd, you'd asked a question pertaining to
2 the value attributable to the \$2800 that is associated
3 with the City of Burnaby permitting cost. So, I have
4 a detailed breakdown of every phase that Corix has
5 built up at UniverCity.

6 And in the first phase, Corix saw a total
7 trench metre cost of \$2,878. Of that was \$69.75 was
8 associated with the City of Burnaby permitting cost,
9 and in the second phase where we encountered those
10 costs again, of the \$2430 per trench metre, only
11 \$124.44 were attributable to the City of Burnaby
12 permit fees. So, a very small piece of the bigger
13 picture. The bulk of the increased cost was really
14 around the unforeseen costs of civil and mechanical
15 installation.

16 MS. TUCK: Secondly, we would like to address the
17 outstanding question of the account treatment for the
18 boiler, and I will turn that over to David Liesch.

19 MR. LIESCH: Yes, I understand that keeping it entered in
20 the rate base may not be an option, and I think we
21 were told about two choices. One might be putting
22 into a deferral account, and the other would be
23 putting it into plant held for future use. Again,
24 back to the spirit and the principles in this
25 developing utility, where you have a temporary gas
26 plant and you don't know when exactly you'll be taking

1 it out of service, but you have the flexibility to
2 possibly do that early if you have a better solution,
3 that's more efficient and serves the growth there.
4 So, given the situation we're in, and the plan we had
5 for the temporary facility, if it is not in a rate
6 base, we think it's appropriate to move that over to a
7 deferral account, and provided that deferral account
8 is earning the same rate of return as the existing
9 deferral account.

10 MS. WALSH: Just a follow up -- Sarah Walsh. A follow up
11 questions. Would you continue to depreciate the asset
12 if you removed it from rate base?

13 MR. LIESCH: No. No.

14 MS. WALSH: So, you are proposing to just earn --
15 continue recovering a return on the --

16 MR. LIESCH: Yes, as Travis stated, the asset won't be
17 suffering any wear and tear in the storage period, so
18 we don't think there is a need to depreciate it.

19 MS. DOMINGO: Yolanda Domingo. So to clarify, that would
20 be a non-rate based deferral account, but it would
21 accrue some kind of rate base return?

22 MR. LIESCH: Exactly the way our existing deferral
23 account is treated. It earns the same return as our
24 rate base.

25 MS. TUCK: Are there any further follow up questions on
26 that point?

1 THE CHAIRPERSON: Thank you very much for that, Ms. Tuck.

2 **ARGUMENT BY MS. TUCK:**

3 MS. TUCK: So, to sum up, Corix is seeking a CPCN, and
4 our submission is that the TES guidelines require this
5 application because the ratio of the costs expended
6 plus the estimated costs, divided by the original CPCN
7 amount result in a ratio greater than one.

8 **Proceeding Time 12:59 p.m. T39**

9 So we request that the Commission grant or
10 confirm the CPCN, or we would be fine with an order
11 that an extension application is required in the
12 alternative.

13 In support of the approval of the CPCN, we
14 would submit that the application and the information
15 provided in support shows that the CPCN is necessary
16 for public convenience and properly conserves the
17 public interest. The information we've provided
18 includes factors relating to continued reliable
19 service serving the forecasted demands of the
20 community, enhanced disclosure to the customers within
21 the community, continued commitment to the energy
22 objectives of the community, the University, and the
23 Province, and enhanced effectiveness and cost
24 reasonableness of the service.

25 With respect to the application for
26 approval of the rate base and revenue requirements

1 described in the application, we're requesting
2 approval of the rate base provided in the application,
3 approval of the updated revenue requirement provided
4 in the application consistent with the BCUC Generic
5 Cost of Capital Proceedings Stage 2 decision
6 applicable to small thermal utilities, including a
7 deemed capital structure of 57.5 percent debt and 42.5
8 percent equity' long-term debt financing costs
9 estimated at 3.75 percent' a return on equity of 9.5
10 based on the current low risk benchmark equity return,
11 plus 75 basis points to account for additional risk
12 related to the development of the small-scale energy
13 utility. Operating costs as set out in the
14 application, and an updated 11-year levelized rate
15 plan set out in the application with an overall 15-
16 year plan compared to the original 20-year plan. We
17 submit that the approval of this rate base and revenue
18 requirement allow for the recovery of prudently
19 incurred costs.

20 Finally we request approval under Sections
21 60 and 61 of the Act for the accounting treatment
22 described in the application, including an updated
23 revenue deferral account as set out in the
24 application, to be used to record the portions of
25 revenue requirements not recovered in the early stages
26 of development, and the rate design set out in the

1 application. And we submit that approval of this rate
2 base and that the approval of the rates, which are
3 just and reasonable, would be the correct decision.
4 And our purpose is to ensure the needs of the
5 UniverCity Committee are -- community are met in the
6 most effective and efficient manner.

7 And we thank the interveners for their
8 participation and the Commission Staff and the
9 Commissioner for your time and consideration.

10 THE CHAIRPERSON: Thank you very much, Ms. Tuck. Mr.
11 Andrews, would you care to proceed?

12 **ARGUMENT BY MR. ANDREWS:**

13 MR. ANDREWS: Yes. On behalf of the B.C. Sustainable
14 Energy Association and the Sierra Club B.C., my
15 clients support the application. Their interests are
16 in reductions of greenhouse gas emissions in general
17 and regarding this project in particular. They also
18 have an interest in the rates being reasonable, both
19 in terms of being either existing or potential
20 ratepayers of this district utility or other district
21 energy utilities, and also because they want to --
22 it's in their interest that rates for these district
23 utility systems be reasonable and competitive with
24 alternative means of heating and -- heating space and
25 water, that because it's important that they be cost-
26 effective compared to other more carbon-intensive

1 methods of providing energy.

2 In terms of the CPCN itself, it's my
3 client's position that it passes the public interest
4 test. The explanation for the change in sizing is
5 reasonable. It's more cost-effective and more energy-
6 efficient. My clients are very interested in the
7 early adoption of the low carbon permanent energy
8 facility, and from what we've heard approval of this
9 CPCN application would not hinder that objective and
10 in some sense you could, say so far so good in terms
11 of moving towards the low carbon facility.

12 **Proceeding Time 1:04 p.m. T40**

13 In terms of the rate increases, rates and
14 rate increases requested, the 2 percent levelized
15 figure is, in my client's view, just and reasonable.
16 It's a competitive rate. The concept of levelization
17 is desirable, and has been approved by the Commission
18 in previous applications of a similar nature.

19 So, subject to any questions that the Chair
20 may have, those are my submissions.

21 I should just add that we take no position
22 on the accounting treatment of the boiler that would
23 be taken out of service.

24 THE CHAIRPERSON: Thank you very much, Mr. Andrews. Ms.
25 Braithwaite?

26 **ARGUMENT BY MS. BRAITHWAITE:**

1 MS. BRAITHWAITE: Thank you. Tannis Braithwaite, for
2 BCOAPO.

3 We support the application subject to a few
4 provisions -- or a few reservations, which I'll go
5 through.

6 First, we would request that the Commission
7 in its decision provide some clarity with respect to
8 Section 2.4.5 of the TEC guidelines, and specifically
9 regarding when a CPCN is required. I submit that this
10 would be useful, not only for this application, but
11 for subsequent applications involving TEC utilities.

12 In its responses to IRs, Corix had provided
13 its interpretation of the section, and we don't take
14 any specific issue with the responses. But we think
15 it would be helpful to clarify in particular whether
16 initial capital costs are the BCUC-approved costs or
17 the actual capital costs of the project. And also
18 whether the rate impact threshold is based on nominal
19 levelized rates and, if so, over what period the
20 levelization is.

21 THE CHAIRPERSON: Is that the completion of your
22 argument?

23 MS. BRAITHWAITE: No.

24 THE CHAIRPERSON: No?

25 MS. BRAITHWAITE: I have more to say.

26 In my submission, the -- with respect to

1 the disposal or treatment of the 2.3 megawatt TEC
2 going forward, BCOA submits that it should be supposed
3 -- disposed of prior to 2020, to a third party, if at
4 all possible. That is, I guess, if at all possible at
5 a reasonable -- without financial losses on the sale,
6 at a reasonable price. And we would say that that's
7 -- that a reasonable price would be either the higher
8 of the market value or the net book value, if the
9 asset is removed from rate base.

10 We also say that the asset should be
11 removed from rate base. There is an issue about -- in
12 this proceeding about the treatment of assets that are
13 no longer used or useful, which this 2.3 megawatt TEC
14 won't be after 2016. And in our submission, it should
15 not continue to earn a rate of return, regardless of
16 whether it's considered to be in rate base or whether
17 it's put into a deferral account makes actually very
18 little difference if the proposal is that it would
19 earn the same rate of return regardless, when it's not
20 actually being used to provide service.

21 With respect to the issue of the recovery
22 period for the RDDA, Corix has proposed to reduce the
23 recovery period from 20 years to 15 years, and BCOAPO
24 -- we agree that there are certain advantages to
25 reducing the recovery period, in that it does reduce
26 overall the rates collected from ratepayers. But in

1 this case, increase -- or making that change in our
2 understanding would increase rates -- 2016 rates by
3 over 16 percent, as compared to using a 20-year
4 recovery period. That's quite a significant increase
5 and we believe that it's too much to be readily
6 absorbed by ratepayers. And so for that reason we
7 would prefer that it remain -- the recovery period
8 remain at 20 years.

9 Those are all of my submissions.

10 **Proceeding Time 1:09 p.m. T41**

11 THE CHAIRPERSON: Thank you very much, Ms. Braithwaite.

12 Is Corix ready to proceed with their reply
13 or would you like a few moments to consider?

14 MS. TUCK: We'd like a few moments, please.

15 THE CHAIRPERSON: Fifteen, ten? Ten minutes.

16 **(PROCEEDINGS ADJOURNED AT 1:10 P.M.)**

17 **(PROCEEDINGS RESUMED AT 1:19 P.M.)**

18 THE CHAIRPERSON: I sense we're all here. Anybody not,
19 please speak up. We're all here.

20 I then declare the session back in action
21 and invite you, Ms. Tuck, to offer your reply to us.

22 **REPLY BY MS. TUCK:**

23 MS. TUCK: Thank you.

24 We thank the interveners for their
25 arguments. In response to Ms. Braithwaite's
26 arguments, we heard three positions taken on behalf of

1 BCOAPO. In respect of the first argument
2 supporting the application subject to the reservation
3 requesting clarity from the Commission, we support
4 that request and look forward to clarity on the TEC
5 Guidelines 2.4.5.

6 In respect of the second point relating to
7 disposal of the boiler and treatment of the boiler,
8 Corix believe the treatment proposed under the
9 deferral account is reasonable and it's reasonable
10 that Corix be allowed to earn a return on capital
11 investment. And Corix commits to exercising every
12 ability to dispose of the asset during the period that
13 it's held in the deferral account.

14 With respect to the third point, the
15 recovery period of the RDDA being 15 years, it's
16 Corix's position that 15 years rather than 20 is a
17 reasonable balance of a cost burden between current
18 and future customers and that it's a fair and balanced
19 approach and that it helps mitigate the risk to which
20 a deferral account is aimed at.

21 Subject to any questions -- oh, and to
22 confirm, the profit on the boiler -- to go back to
23 point 2, we believe it's reasonable that we be allowed
24 to earn a return on our capital investment, but the
25 disposal of the asset if possible to a third party
26 would result in the costs going back to the -- I'm

1 sorry, a return going back to the core market.

2 THE CHAIRPERSON: Sorry, return going back to?

3 MR. LIESCH: The full sale proceeds goes to the core
4 market including if we can make a profit on it.

5 THE CHAIRPERSON: Thank you very much.

6 Well, I would very much like to offer a
7 ruling from the bench, but there are a number of
8 questions which I feel I have to reflect on for a
9 little while and will give you my reply as soon as I
10 possibly can. There's a lot of thought requiring
11 information that I've received this morning, and I
12 assure you that I will not delay any more than is
13 necessary with it.

14 So with that I'll thank you all for coming
15 and declare our proceeding closed. And I wish you all
16 a good afternoon.

17 **(PROCEEDINGS ADJOURNED AT 1:23 P.M.)**

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