**Minutes of the Eighty Forth Meeting of the Ethics Committee on Assisted Reproductive Technology**

**29 October 2020**

Held via zoom on 29 October 2020

**In Attendance**

Iris Reuvecamp Chairperson

Paul Copland Member

Michele Stanton Member

Mike Legge Member

Mary Birdsall Member

Mania Maniapoto-Ngaia Member

Jude Charlton Member

Tepora Emery Member

Karen Reader ACART member in attendance

Nic Aagaard Acting Manager, Ethics

Hayley Robertson Senior Advisor, Ethics

Kirsten Forrest Senior Advisor, Ethics

Courtney Parnell Advisor, Ethics

Tania Siwatibau Administrator, Ethics

1. **Welcome**

The Chair opened the meeting by welcoming all present and noting apologies were received from Mike Legge.

Revised application forms for ACART’s recently published *Guidelines for Family Gamete Donation, Embryo Donation, the Use of Donated Eggs with Donated Sperm and Clinic Assisted Surrogacy* have not yet been developed to align with the revised guidelines. These are expected to be published early 2021 in consultation with ECART and Fertility Clinics.

Applications at this meeting were considered under the revised Guidelines.

1. **Conflicts of Interest**

Dr Mary Birdsall declares (on an ongoing basis) that she is a shareholder in Fertility Associates and has interests on a professional and a financial basis.

1. **Confirmation of minutes from previous meeting**

The minutes from the 3 September 2020 meeting were confirmed.

1. **Application E20/117 for Surrogacy involving an Assisted Reproductive Procedure**

Michele Stanton opened the discussion for this application. The committee considered this application in relation to the *Guidelines for Surrogacy involving an Assisted Reproductive Procedure* and the principles of the HART Act 2004.

**Issues discussed included:**

* The committee noted that a clear medical reason to justify the use of a surrogate exists to assist the intending parents in this application to have another child. The intending parents had their first child through a surrogacy arrangement and the application notes that they have a good insight and understanding of the surrogacy, birth and adoption process.
* The birth parents in this application have children and consider their family to be complete. The application outlines that the birth parents have had the risks associated with a surrogate pregnancy explained to them.
* The intending parents and the birth parents initially met through a surrogacy forum and are now friends.
* Cultural and religious customs have been discussed during the counselling sessions and both parties have stated that counselling has been culturally appropriate.
* The issue of termination has been discussed and the intending parents understand that once an embryo is transferred to the birth mother that she has the legal right to make any decisions about the pregnancy including the decision to terminate a pregnancy.
* The intending parents have sought a preliminary assessment from Oranga Tamariki.
* Both the intending parents and the birth parents have sought independent legal advice and the legal issues have been discussed at those sessions as well as during their counselling sessions.

**Decision**

The Committee agreed to **approve** this application.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **Application E20/118 for Surrogacy involving an Assisted Reproductive Procedure**

Iris Reuvecamp opened the discussion for this application. The committee considered this application in relation to the *Guidelines for Surrogacy involving an Assisted Reproductive Procedure* and the principles of the HART Act 2004.

**Issues discussed included:**

* The committee noted that a clear medical reason to justify the use of a surrogate exists to assist the intending parents in this application to start their family and acknowledged the difficulty for the intending parents in living with a long-term health condition.
* The birth parents in this application have children and consider their family to be complete. The application outlines that the birth parents have had the risks associated with a surrogate pregnancy explained to them.
* The intending parents and the birth parents met through working in the same profession and are now close friends.
* The application notes that if IVF is unsuccessful, an egg donor may be needed to assist the intending parents to have a child.
* The issue of termination has been discussed and the intending parents understand that once an embryo is transferred to the birth mother that she has the legal right to make any decisions about the pregnancy including the decision to terminate a pregnancy.
* The intending parents have sought a preliminary assessment from Oranga Tamariki.
* Both the intending parents and the birth parents have sought independent legal advice and the legal issues have been discussed at those sessions as well as during their counselling sessions.

**Decision**

The Committee agreed to **approve** this application.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **Application E20/119 for Embryo donation for reproductive purposes**

Paul Copland opened the discussion for this application. The committee considered this application in relation to the *Guidelines for Embryo Donation for Reproductive Purposes* and the principles of the HART Act 2004.

**Issues discussed included:**

* The donor couple have remaining embryos created from their own IVF treatment that they would like to donate to the recipient couple. The donor couple have children born from the embryos and consider their family to be complete.
* The donor couple in this application are clinic donors who have described their motivation of entering into the intended arrangement as wanting to help others who have experienced infertility to have a family, and to give their frozen embryos a chance at life.
* The application notes that the donor couple plan to be open with their children about the intended donation at an age appropriate time. Both parties have also declared intentions to be open with any child/ren born of this arrangement.
* The application notes that medical advice is that the intended embryo donation would give the recipient couple the best chance of pregnancy given the recipient woman’s age and the couples history of infertility. The committee also noted the recipient woman’s age and planned obstetric support should a pregnancy eventuate.
* Both parties understand that the donor couple can withdraw their consent up to the time the embryos are transferred.
* Both parties have sought independent legal advice and are aware of the legal issues involved with an embryo donation arrangement.

**Decision**

The Committee agreed to **approve** this application.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **Application E20/120 for Creation and Use of Embryos from donated eggs and donated sperm**

Iris Reuvecamp opened the discussion for this application. The committee considered this application in relation to the *Guidelines on the Creation and Use, for Reproductive Purposes, of Embryos created from Donated Eggs and Donated Sperm* and the principles of the HART Act 2004.

**Issues discussed included:**

* The application notes the recipient couple’s history of infertility and a medical need for donor eggs and donor sperm. The medical report states that the recipient woman is in good health and outlines appropriate pregnancy management would include oversight by an obstetric specialist.
* The recipient woman has been informed of the usual risks associated with a carrying a pregnancy not biologically related to the recipient woman, which are also set out in her medical report.
* The recipient woman and the egg donor initially met online through a donation forum. The egg donor has a child but has not yet completed her family.
* The sperm donor in this application belongs to the same religious organisation as the recipient couple and is a close personal friend of both of the recipients. The application notes that he has previously donated sperm overseas and is familiar with the process.
* Both gamete donors in this application are friends of the recipient couple but do not know each other personally.
* Cultural and religious customs have been discussed during the counselling sessions and both parties have stated that counselling has been culturally appropriate.
* Both gamete donors have been informed that any embryos created for the recipient couple using their gametes will only be available for use by the recipient couple, and that they can withdraw consent to donate up to the point where the embryos are created. They understand that the recipient couple then have all legal rights and responsibilities for the use of any embryos including decisions around pregnancy.
* The committee noted that this was the situation under the old Guidelines, but noted the changes relating to on-donation of embryos under the revised *Guidelines for Family Gamete Donation, Embryo Donation, the Use of Donated Eggs with Donated Sperm and Clinic Assisted Surrogacy.* The committee noted that the guidelines have changed since the application was put together, and that it was important that all parties were made aware of the new rules.

**Decision**

The Committee agreed to **approve** this application, noting that if the recipient couple wish to consider on-donation at a later point, counselling would need to be provided and consent from both gamete donors would need to be given before on-donation could occur.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **Application E20/121 for Surrogacy involving an Assisted Reproductive Procedure**

Jude Charlton opened the discussion for this application. The committee considered this application in relation to the *Guidelines for Surrogacy involving an Assisted Reproductive Procedure* and the principles of the HART Act 2004.

**Issues discussed included:**

* The committee noted that a clear medical reason to justify the use of a surrogate exists to assist the intending parents in this application to start their family.
* The birth mother in this application is single and considers her family to be complete. The application outlines that the birth parents have had the risks associated with a surrogate pregnancy explained to them.
* There is a within family aspect to this application as the birth mother is the sister of one of the intending parents. The issue of openness was discussed and the application notes that the birth mother anticipates that she will be a special aunt to any resulting child.
* The issue of termination has been discussed and the intending parents understand that once an embryo is transferred to the birth mother that she has the legal right to make any decisions about the pregnancy including the decision to terminate a pregnancy.
* The intending parents have sought a preliminary assessment from Oranga Tamariki.
* Both the intending parents and the birth parents have sought independent legal advice and the legal issues have been discussed at those sessions as well as during their counselling sessions.

**Decision**

The Committee agreed to **approve** this application.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **Application E20/122 for Surrogacy involving an Assisted Reproductive Procedure (and egg donation)**

Tepora Emery opened the discussion for this application. The committee considered this application in relation to the *Guidelines for Surrogacy involving an Assisted Reproductive Procedure* and the principles of the HART Act 2004.

**Issues discussed included:**

* A clear reason to justify the use of a surrogate and egg donation exists.
* The intending parents in this application have a child who was born through an ECART approved surrogacy arrangement. They would like to have another child to expand their family.
* The egg donor in this application has a child and the intending parents used the same egg donor for their first child.
* The birth mother in this application is close friends with the intending parents. She is currently single and has children. She considers her family to be complete. The birth mother’s age was discussed and the application notes that she has expressed a good understanding of the proposed treatment for herself and the other parties involved. The application states the birth mother will be under the care of an obstetrician during pregnancy.
* The application notes that one embryo is available for transfer and the intending parents do not intend to create more if this embryo is not successful.
* Testamentary guardianship arrangements, in the unlikely event that the intending parents are unable to care for the child, have also been discussed and agreed.
* The issue of termination has been discussed and the intending parents understand that once an embryo is transferred to the birth mother that she has the legal right to make any decisions about the pregnancy including the decision to terminate a pregnancy.
* The intending parents are in contact with Oranga Tamariki to update their approval for adoption given the time that has passed since adopting their child in 2017.
* Both the intending parents and the birth parents have sought independent legal advice and the legal issues have been discussed at those sessions as well as during their counselling sessions.

**Decision**

The Committee agreed to **approve** this application.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **Application E20/123 for Surrogacy involving an Assisted Reproductive Procedure**

Mary Birdsall opened the discussion for this application. The committee considered this application in relation to the *Guidelines for Surrogacy involving an Assisted Reproductive Procedure* and the principles of the HART Act 2004.

**Issues discussed included:**

* A clear medical reason to justify the use of a surrogate exists.
* The intending parents in this application have a child who was born through an ECART approved surrogacy arrangement. They would like to have another child using the same surrogate to expand their family.
* The birth parents in this application have children and consider their own family to be complete.
* The earlier surrogacy arrangement went well with a healthy child born. Close family ties are described throughout this application and the wider family unit are continuing to support the intending parents to complete their family.
* The issue of openness was discussed, and the committee noted that there is strong family support for the intending parents and the proposed arrangement to try for another child.
* The intending parents are familiar with the legal issues involved with a surrogacy arrangement having been through the process, including the adoption process, previously, and they intend to adopt any child born of this arrangement. The intending parents have a current approval from Oranga Tamariki for their last surrogacy arrangement and they intend to ensure this is up to date for any resulting pregnancy.
* Testamentary guardianship arrangements, in the unlikely event that the intending parents are unable to care for the child, have also been discussed and agreed.
* The issue of termination has been discussed and the intending parents understand that once an embryo is transferred to the birth mother that she has the legal right to make any decisions about the pregnancy including the decision to terminate a pregnancy.
* The committee noted that this was a very clear and comprehensive application.

**Decision**

The Committee agreed to **approve** this application.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **E20/83 reconsideration of request for Surrogacy involving an assisted reproductive procedure with sperm donation**

Iris Reuvecamp opened the discussion for this application. The committee considered this application in relation to the *Guidelines for family gamete donation, embryo donation, the use of donated eggs with donated sperm and clinic assisted surrogacy,* and the principles of the HART Act 2004.

Dr Mary Birdsall declared a conflict of interest and the Committee agreed that she would leave the meeting and would not take part in the discussion or decision-making for this application.

**Issues discussed included:**

* ECART had deferred this application as it was concerned about the intending mother’s medical condition, the severity of her illness and her ability to care for a child on a day-to-day basis. The Committee asked whether the intending mother’s condition fluctuated in severity and what the risks of a significant health event in the next 10 years would be. ECART also wanted to see any mental health or psychiatric history in the context of the application and, in relation to the best interests of child, should the intending mother’s condition worsen, requested counselling reports for the intending mother’s sister and parents as they were nominated as guardians who would take care of the child. An additional medical report was also requested for the birth mother.
* The information received in relation to the intending mother’s medical condition was discussed. The report concluded that the intending mother’s condition is relatively stable, and her condition isn’t expected to fluctuate in any clinically significant way.
* Brief comment was also provided to ECART in relation to the intending mother’s mental health. This was also addressed in a letter from the intending mother’s GP. The Committee discussed whether the information satisfied the Committee’s request. The Committee noted that there was a lack of substantive detail regarding the intending mother’s mental health and psychiatric history. This was limited to a comment by the fertility treatment service provider that the intending mother manages difficulty well and is resilient, a report by the intending mother that she has never sought help for her mental health, and a report from the intending mother’s GP that there is “no relevant mental health or psychiatric history”
* The Committee would expect that, in the event that the intending mother has any mental health or psychiatric history, the Committee would be provided with the details of this. It does not consider it sufficient for other health service providers and/or the applicant to determine what may or may not be relevant in that regard.
* The Committee noted that the counsellor’s report stated: “IM is a private person and she prefers to handle the gathering of information herself for the application. I have not had direct contact with her GP, her specialist Tim King or her OT social worker; something I would normally do in the process of putting an application together.” The Committee was concerned that, as the counsellor hadn’t received the information directly, there was a layer of independence that was missing in this process.
* It is the Committee’s expectation that the clinic obtains this sort of information directly, not via the applicant.

In relation to counselling requested for IM’s parents and a second testamentary guardian the Committee noted that IM attended these sessions too. The Committee queried whether in the context of a situation where counsellors are advised to give counselling to someone who has been appointed as a testamentary guardian, the expectation would be that the intending parent/s attend that counselling session. The Committee noted that the counselling process normally includes separate counselling for individual applicants and joint counselling where the applicants are counselled together about the implications of an intended procedure. While testamentary guardians aren’t usually counselled, the principle remains the same, that is, that that counselling can take place in individual sessions without undue influence. However, the counselling reports in this application don’t suggest any coercion or that the parties were uncomfortable; they suggested that the testamentary guardians were strongly supportive of the intending mother.

* In relation to the response for further medical information about the birth mother the Committee noted that her physician did not think that her pregnancy history nor her medical history would preclude her from being a surrogate. Her physician had referred her to an obstetric specialist, but a copy of the specialist report was not provided with this response. A summary was given that noted the specialist’s view of the risks to the birth mother and how they could be managed.
* Despite this, the Committee remained of the view the birth mother’s medical history could mean that her health and the health of the potential child are at greater risk. The Committee has concerns about the suitability of a surrogate at the age of this surrogate, presenting with a significant medical history.

**Decision**

In respect of its request for further information about any mental health or psychiatric history of the intending mother, the Committee did not believe it was provided with sufficient information to satisfy itself that this potential concern had been covered off. Further, the Committee noted that, with respect to the information requested about the birth mother, it would expect to receive the relevant specialist report(s) directly (i.e. not just by way of summary from the fertility service provider). Likewise, the Committee was concerned about the possibility for the filtering of relevant information by the applicant and/or other health service providers. The Committee is of the view that it ought to be provided with the information requested in full, and directly, so that it is able to reach a properly considered decision. It is for the Committee to determine relevance – not those involved in the application/the care of the parties.

While one option may be to again request the information it considers necessary to make a decision regarding this matter, the Committee considered that its concern about the birth mother’s suitability as a surrogate was such that it considered it appropriate to decline the application. This is because the Committee was of the view that the birth mother’s medical history places her own health and that of any potential child at unacceptable risk.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **Application E20/84 for reconsideration of request for PGD with HLA tissue typing**

Paul Copland opened the discussion for this application. The committee considered this application in relation to the *Guidelines on Preimplantation Genetic Diagnosis with Human Leucocyte Antigen Tissue Typing* and the principles of the HART Act 2004.

**Issues discussed included:**

* The Committee first considered this application in June and deferred a decision in order to seek some further information to satisfy the Committee that sections 2c and 2h of the Guidelines were met.
* The Committee was reassured by the information provided that outlined the safeguards in place for the potential child once born and the way that child’s rights will be protected *vis a vis* the needs of the existing child and sibling. The Committee noted the safeguards appear well thought out and it was reassured to know that future plans have been well-discussed.

**Decision**

The Committee agreed to **approve** this application.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **Application E20/109 for reconsideration of request for Surrogacy involving an assisted reproductive procedure**

Iris Reuvecamp opened the discussion for this application. The committee considered this application in relation to the *Guidelines for family gamete donation, embryo donation, the use of donated eggs with donated sperm and clinic assisted surrogacy,* and the principles of the HART Act 2004.

**Issues discussed included:**

* ECART deferred this application at its September meeting to request a report that contained further information on the intending mother’s prognosis, confirmation of her current health status and the potential for her condition to be genetic. The Committee had also expressed concerns about her long-term prognosis and her ability to care for the potential child on a day-to-day basis. The Committee also wished to see comprehensive information about her condition and the risk of the potential child inheriting the same condition.
* In terms of her long-term prognosis, correspondence from a physician states that her current condition does not contraindicate her having a child by use of a surrogate. It was also confirmed that her illness has minimal effect on her day to day living.
* The intending mother’s clinical symptoms present as though she has a particular genetic condition, but she has tested negative for that condition. It therefore appears that the cause of these clinical symptoms are unknown.
* The responses received address the request for additional information. The information about the extent to which the condition is genetic remain outstanding but there may not be a ready answer to this question. The outstanding issue then is about the risk of the condition being inherited by any resulting child. ECART agreed that the risks are real but appear low and agreed to approve this application.

**Decision**

The Committee agreed to **approve** this application.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **Application E20/115 Reconsideration of application for Embryo Donation for reproductive purposes**

Mary Birdsall opened the discussion for this application. The committee considered this application in relation to the *Guidelines for family gamete donation, embryo donation, the use of donated eggs with donated sperm and clinic assisted surrogacy,* and the principles of the HART Act 2004.

**Issues discussed included:**

* ECART considered this application for embryo donation at its September meeting under the previous ACART *Guidelines on Embryo Donation for Reproductive Purposes* and declined it on the basis that neither the recipient woman nor the recipient partner had a medical condition that made donor embryo use appropriate. In that application there was no clear evidence given to the Committee about why the couple did not wish to use their own gametes in IVF treatment. The reason given to the Committee about the reluctance to use their own gametes in IVF treatment was around disposal of surplus embryos. A range of treatment options using the couple’s own gametes had been discussed including freezing eggs and creating one embryo at a time for transfer so that there would be no surplus embryos.
* The request for reconsideration includes a report from the recipient woman’s fertility specialist stating that the RW does have a medical condition that meets the requirement for embryo donation under the previous ACART guidelines. The report notes that they do not wish to use the option of freezing eggs and they do not wish to discard unused eggs.
* The Committee notes that it would have been useful for the medical report to explain how the RW’s medical condition affected the woman’s ability to use her own eggs. This was not immediately clear to the Committee. Additionally, there is no mention of her having low ovarian reserve or any other issue that would impact on her using her own eggs.
* The Committee noted that there is no mention in the reports that the recipient woman is not able to use her own eggs. The original medical report stated that the recipient couple have had the options “such as but not limited to, IUI, minimal IVF stimulation, inseminate one oocyte at a time, etc. discussed with them but they say they feel most comfortable with the treatment option of embryo donation”. The suggestion in that report was that embryo donation is the preference of the intending parents, not their only option. The Committee noted that it had not previously come across a situation where a woman was concerned about the disposal of her eggs.
* The Committee considered whether this procedure is the “best or only” opportunity for the intending parents to have a child given that they have said they do not want to use their own gametes in IVF treatment as they do not want to discard unused embryos or unused eggs. The applicants do not appear to have used other options to help them conceive prior to this application for embryo donation. The Committee concluded that this procedure is not the “best or only” opportunity for the intending parents to have a child.
* Additionally, section 4(a) of the HART Act 2004 states “the health and well-being of children born as a result of the performance of an assisted reproductive procedure or an established procedure should be an important consideration in all decisions about that procedure”. While ACART has rescinded the mandatory biological link requirement for assisted reproductive procedures in its new guidelines and a genetic link is no longer a mandatory requirement, the Committee consider that it remains a consideration when determining whether or not a procedure is the “best or only” opportunity for the intending parents to have a child, on the basis of current literature that suggests that a genetic link to parents is in the best interests of any potential child.

**Decision**

The Committee agreed to **decline** this application.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **Application E19/80 Reconsideration of application for Surrogacy involving an assisted reproductive procedure**

Michele Stanton opened the discussion for this application. The committee considered this application in relation to the *Guidelines for family gamete donation, embryo donation, the use of donated eggs with donated sperm and clinic assisted surrogacy,* and the principles of the HART Act 2004.

**Issues discussed included:**

* ECART considered this application at its September meeting and agreed to defer it. In the letter to the fertility treatment service provider ECART noted the evidence that pregnancy success rates are improved when a woman’s BMI is below 35 and, that the Committee would be happy to approve the application if the birth mother were to have a BMI below 35. The response notes that the birth mother has achieved this.

**Decision**

The Committee agreed to **approve** this application.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **Application 17/56 requesting extension of approval for Surrogacy involving an assisted reproductive procedure**

Iris Reuvecamp opened the discussion for this application. The committee considered this application in relation to the *Guidelines for family gamete donation, embryo donation, the use of donated eggs with donated sperm and clinic assisted surrogacy,* and the principles of the HART Act 2004.

**Issues discussed included:**

* This application is a request for an extension of approval for a surrogacy involving an assisted reproductive procedure.
* The application for an extension is required because embryos created from the intending parents’ gametes have been used and a child has been born.
* The original reason requiring the use of a surrogate remains as previously.
* The surrogate who gave birth to the intending parents’ child is willing to carry a further pregnancy.
* The medical report for the birth mother notes that her pregnancy and delivery were unremarkable, and she has coped emotionally with the experience of acting as a surrogate. There have been no changes to her health, and in her consultant’s view, there is no reason why she couldn’t successfully carry further pregnancies.
* Counselling with the birth mother in July 2020 reported no significant change in her social or medical conditions other than that she gave birth to a child for the intending parents. She reports a positive relationship with the intending parents and their family, and they are in regular contact. She reports an easy birth and quick recovery. She is aware that another pregnancy might not be achieved but is happy with that, has fair expectations about the process and is willing to go ahead with further treatment should ECART approve this application.

**Decision**

The Committee agreed to **approve** this application.

**Actions**

Secretariat to draft a letter from the Chair to the clinic informing the medical director of the committee’s decision.

1. **Correspondence**
* Query about the application process for a female couple who wish to receive donated embryos and who both wish to use the embryos in fertility treatment so that they both have the opportunity of carrying a pregnancy. If ECART were to approve the application, it would be approving the ART and the usual conditions would apply such as notifying ECART of a birth or a change in circumstances and seeking further consideration by. Separate medical reports within the context of one application would be acceptable to ECART. The counselling process will likely ascertain who might have treatment first and the implications of that.
* In the context of the consultation on the Fertility Services Standards a question has been raised about whether there should be a specific reference to decision making by gamete donors in terms of the conditions they impose not being discriminatory. ECART’s understanding is that gamete donors can impose restrictions that they think are appropriate and the standards can’t limit that ability.
* Previous advice to clinics by the Human Rights Commission was that altruistic donors can place restrictions on use of their gametes without it constituting unlawful discrimination.

**Meeting close**

Confirmation of need for change of date for December 2020 meeting.

Confirmation of ECART member in attendance at next ACART meeting on 10 December 2020 scheduled in Wellington and via zoom Michele Stanton.

Confirmation of ECART 2021 meeting dates and secretariat to allocate extended storage application introductions.

Confirmation of ACART meetings up to June 2021 and ECART member in attendance for each of those meetings

18 February – Iris Reuvecamp

15 April – Paul Copland

10 June – Tepora Emery