

IN THE MATTER OF AN APPLICATION BY AN OBJECTOR FOR
REVIEW OF A PLANNING DECISION

P469-2024

BETWEEN: **CROSS COUNTRY SKIING ASSOCIATION VICTORIA INCORPORATED**

Applicant

AND: **ALPINE RESORTS VICTORIA TRADING AS FALLS CREEK ALPINE
RESORT**

Respondent

AND: **MINISTER FOR PLANNING**

Responsible Authority

WITNESS STATEMENT OF SANDRA [REDACTED] PAUL

WITNESS STATEMENT

I, Sandra [REDACTED] Paul of [REDACTED] do say as follows:

A. INTRODUCTION

1. I am the current president of Cross Country Skiing Association Victoria (**the Association**) the applicant in these proceedings. My experience in the sport of cross country skiing is set out in section B of this witness statement. I am aware of the proposed redevelopment of the ANARE shed, the construction of a new car park and the proposal to clear Bogong High Plains Road during the declared snow season to provide access to the car park and ANARE shed during the declared snow season (**the Proposal**).
2. I am an International FIS (International Ski and Snowboard Federation) (**FIS**) Technical Delegate (**TD**) for cross-country ski races. The meaning of this is explained in section C of this witness statement.
3. I am frequently the technical delegate for championship cross country ski races held at Falls Creek, including national and junior national championships. In section D.2 of this witness statement, I set out the requirements for a standardised “homologated” race course. I explain in sections D.3 and D.4 how the current 3 FIS Homologated race loops will be unusable if the Proposal goes ahead. The FIS Qualified Homologation Inspectors in Australia believe there is no viable alternative homologated race loops available for these races without major bridging construction and earth works.
4. Since 2019, I have been the technical delegate for the Kangaroo Hoppet International ski marathon, the largest cross-country ski race in the Southern Hemisphere. In 2023 I was appointed the Chief of Race for the Kangaroo Hoppet. In section E of this witness statement, I set out the impact of the Proposal on the Kangaroo Hoppet, which is the largest single event to take place at Falls Creek on an annual basis. As explained below, the race could not proceed if the Proposal were to proceed.
5. Finally, section F of this statement sets out my views on the detrimental impact that the Proposal would cause to Falls Creek’s reputation as Australia’s premier cross country ski resort.
6. **Annexure A** to my statement is a copy of the FIS International Ski Competition Rules – Book II Cross Country (**FIS Rules**). I refer to the FIS Rules throughout my statement.

B. EXPERIENCE AND QUALIFICATIONS

7. I represented Australia at the Winter Olympic Games in 1992 and 1994 in the sport of biathlon, which consists of cross country skiing and target shooting. I also represented Australia in the 1993 Cross Country Ski World Championship in Falun, Sweden.

8. I was appointed in 2006 to the Lake Mountain Alpine Resort Management Board and was appointed to the Falls Creek Alpine Resort Board in 2008 by the Victorian government because of my expertise in cross country skiing.
9. I first qualified as a TD in 2016. Following that time, I gained experience in both Australia at FIS races and at the New Zealand Winter games FIS race series and the New Zealand World Loppet Merino Muster. In August 2018, I obtained my FIS Technical Delegate Licence. The meaning of the FIS TD Licence is explained in section C below.
10. I have presented at and organised Oceania TD Seminars since 2021. My experience as a TD includes:
 - (a) three Kangaroo Hoppet races (in 2018, 2019 and 2022 – the 2023 and 2024 races did not take place due to adverse snow conditions);
 - (b) two Victorian Interschools Championships at Mt Buller (in 2023 and 2024);
 - (c) two New Zealand World Loppet Merino Muster races (in 2018 and 2024); and
 - (d) numerous Australian Cross Country Championships and Roller Ski Championship races.
11. I have been nominated to be a member of two FIS (*Fédération Internationale de Ski* or International Ski Federation) sub-committees, the “Sub Committee Popular” and the “Sub Committee Rules and Control”. I expect these nominations to be endorsed at the FIS Autumn Meeting September 2024 in Zurich.
12. I am on a 4-person working group within the FIS Sub Committee Rules and Controls, looking at the use of sanctions in all levels of FIS cross country skiing, including World Cup and Olympic races. I attended the FIS Spring meetings 2024 in Portoroz Slovenia.
13. I also have a FIS Cross Country Homologation Level 3 Inspector qualification, after completing the FIS Homologation Seminar in Ramsau am Dachstein, Austria, in May 2024. The meaning of homologation is explained in section D below.

C. THE ROLE OF A TECHNICAL DELEGATE

14. A TD is a delegate of FIS or the governing body which appoints them, and is the guarantor for FIS or the governing body that the competition is conducted in accordance with the FIS rules (Rule 303.2.1 of the FIS Rules). I consider the role of the TD to be an important one for the ongoing practice of competitive cross country ski racing. Not only is the TD responsible for ensuring that races are carried out fairly and in accordance with the rules, but the TD's decisions can help avert safety risks inherent in cross country skiing.

15. The TD must have a valid licence from FIS. The TD acts as a consultant to the organising committee in all matters relating to the preparation, carrying out and following up of the competition and is responsible for organising the work of the race jury (Rule 303.2.1 of the FIS Rules). Among other things, the race jury adjudicates complaints and disputes in relation to races. The TD is the chair of the race jury (Rule 303.1.1 of the FIS Rules).
16. To become a Licensed TD,¹ candidates (described as “national TDs”) must first attend a FIS TD seminar over at least two days, which incorporates both testing of theoretical knowledge and practical training: section 6.1 of the FIS “Rules for the organisation, education and nomination of FIS Cross-Country Technical Officials” (**FIS Rules – Technical Officials (Annexure B)**). Section 5.1 of the FIS Rules – Technical Officials sets out the requirements for a FIS TD seminar. A candidate may then be an assistant TD at FIS-sanctioned races, and must pass a minimum training period of two years, during which time they must gain experience at at least two events, under the supervision of, and evaluated by, a Licenced TD (section 6.1 of the FIS Rules – Technical Officials).
17. Once the candidate has met the training and experience outlined above, they must attend a second TD seminar. where they are required to present on a subject and be examined by a panel of experienced TDs. If successful, the person qualifies as a Licenced TD.
18. To remain accredited as a technical delegate, the TD must attend a TD seminar every four years, and should attend a further TD seminar every two years (section 4 of the FIS Rules – Technical Officials). FIS expects that TDs are active and take assignments to ensure that the TD continues to practice their skills (section 4 of the FIS Rules – Technical Officials).

D. FIS HOMOLOGATION OF RACE COURSES

D.1 Introduction

19. Homologation of a race course is the standardisation process applied to ensure that cross country race courses are consistent with each other. Annexed to this statement at **Annexure C** is the document titled “FIS Homologation procedure for cross-country skiing courses” dated 2023 (**FIS Homologation Procedure**). Section 1 of that document provides the following overview of homologation, and is extracted below:

The FIS homologation is the approval issued by a FIS appointed homologation inspector and certifies that the homologated Cross-Country course is suitable to host FIS competitions.

Homologation represents a “system of evaluation” that is meant to guide the development and the upgrade of Cross-Country competition courses and venues. It is not just a set of

¹ This is referred to in Australia as a “Level 4” TD.

numbers and standards but is a process towards certification, that provides a forum for constructive discussion between Organizers, FIS and Inspectors.

D.2 Competition Course General Design Criteria Requirements

20. Rule 311.2.1 of the FIS Rules provides that all FIS cross country competitions should be carried out on homologated courses, except for popular competitions (described in section E.2 below) and substitute courses if approved by the Jury (for example if the existing course needs to be changed because of poor snow conditions). The existence of a FIS race allows athletes to use the race to obtain qualification for certain events, such as World Championships or the Olympic Games.
21. Rule 311.1.1 of the FIS Rules provides that:
- (a) cross-country courses must be laid out to provide a “technical, tactical and physical test of the competitors’ qualifications”;
 - (b) cross-country courses “should be laid out as naturally as possible to avoid any monotony, with rolling undulating sections, climbs and downhill sections”; and
 - (c) “[r]hythm should not be broken by too many sharp changes in direction or steep climbs”.
22. In homologating a race course, the following definitions as set out in rule 311.2.4 of the FIS Rules must be kept in mind:
- 311.2.4.1 HD (height difference) is the difference in height between the lowest and highest points of a competition course.
 - 311.2.4.2 MC (Maximum climb) is the climb with the highest partial total climb (PTC), in other terms, the biggest uphill. The uphill can be interrupted by a section of undulating terrain that does not exceed 150 m in length or a downhill that does not exceed 10 m PHD.
 - 311.2.4.3 TC (Total climb) represents a total of all climbs on the course.
23. These terms are all expressed in terms of vertical climb, rather than horizontal distance.
24. **Annexure D** to my statement is a copy of the FIS cross-country course and venue design guidelines dated 2023 (**FIS Course Guidelines**). The FIS Course Guidelines are relevant to consideration of homologation requirements for race courses.
25. The FIS Course Guidelines provide further elaboration of the principles expressed in the FIS Rules. They provide the following definition of **PTC**:

Partial Total Climb (PTC)

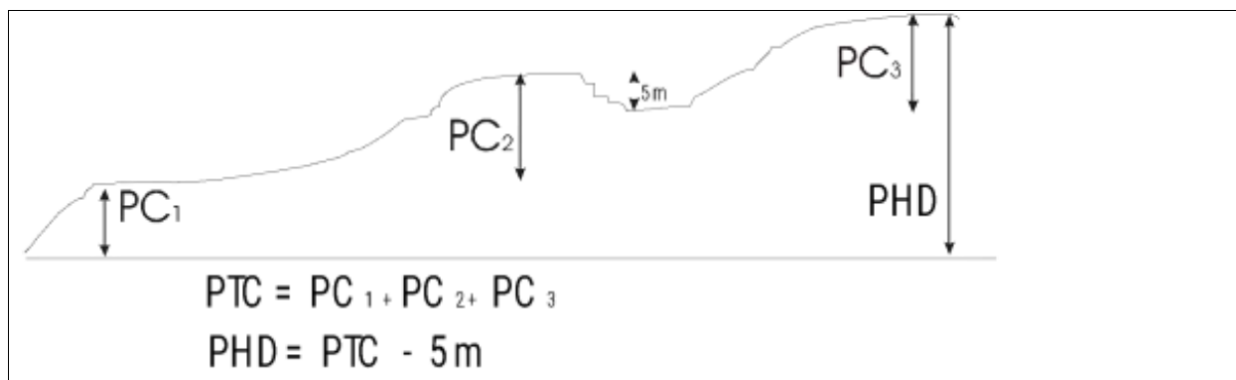
PTC (Partial Total Climb) is the sum of all partial climb segments of a climb that make up an A or B climb that has some varied gradients or short downhill breaks (see figure below where $PTC = PC_1 + PC_2 + PC_3$).

If an A or B uphill has no downhill parts then the $PTC = PHD$.

PTC is used to calculate the Maximum Climb and Total Climb.

26. That is, in assessing how large an “A” or “B” climb is (the meaning of which is discussed in paragraphs 28 and 29 below), one must consider the sum of the vertical gain on each section of the climb. The FIS Course Guidelines provide the following diagram (Figure 1) which explains the interaction between partial climb segments, partial total climb and partial height difference:

Figure 1: Diagram from FIS Course Guidelines



27. The term **PHD** (short for partial height difference) is referred to in the FIS Rules, but is not itself defined there. Instead, the FIS Course Guidelines indicate that the term denotes the absolute change in elevation from the bottom of a hill to the top of a climb, ignoring any descents mid-way through that climb.
28. An **A-climb** is a major climb on a race course. It is described in the FIS Course Guidelines as:
- a segment of a course that has a PTC equal to or greater than 30 m. The average gradient must be between 6 and 14%. They typically include short segments that have gradients less than 9%, including negative gradients (downslopes). They may include C-climbs.
29. A **B-climb** is a moderate climb on a race course. It is described in the FIS Course Guidelines as:
- a segment of a course that has a PTC between 10 and 29 m. The average gradient must be between 6 and 14%. They may include short segments that have gradients less than 9%, including negative gradients (downslopes). They may include C-climbs.
30. The FIS Course Rules also prescribe the circumstances where undulating terrain will be considered part of an A-climb or B-climb, and when it will be excluded from that climb. They

further provide, in section 3, that a competition course must have a distribution of terrain of approximately 1/3 uphill, 1/3 downhill and 1/3 undulating terrain.

31. Rule 311.2.5.2 of the FIS Rules provides that a 5km course for lower-level FIS competitions (that is, excluding World Championship, Junior/U23 World Championship, World Cup and Olympic Games level races) should meet the following criteria:
- (a) at least one climb with a PHD of 25 metres or greater;
 - (b) up to 100 metres of total HD;
 - (c) a maximum climb with a total PTC (that is, the vertical gained on all component parts of a larger hill) of between 25 and 80 metres; and
 - (d) total climb of between 135 metres and 210 metres.
32. The FIS Course Guidelines state, on page 7, that a 5km course should have 1 to 2 A-climbs, and 3 to 5 B-climbs per lap, with A-climbs representing 20-55% of the Total Climb (TC) and B-climbs representing 20-55% of the TC.
33. The FIS Course Guidelines also prescribe detailed requirements for the design of downhills, particularly downhill corners. The FIS Course Guidelines state that the design of downhills must take the following into consideration:
- Downhills should be laid out so that they provide technical challenges to the athletes, and avoid opportunities for drafting (e.g. very long and straight downhills)
 - Consideration for the athletes' safety is very important, so corners must be sweeping and with a constant radius, especially at the bottom of downhills. There are formulas developed for how to design downhill corners based on the skier's estimated speed and the radius of the curve (see below)
 - High speed downhills must be wide enough such that skiers can get around other skiers in case of a crash
 - Dangerous areas adjacent to the course must be fenced or protected (steep banks and ditches, trees, rocks)
 - Avoid sections that create compressions such as a high speed downhill followed by an immediate steep uphill
 - Avoid high speed "blind corners" where skiers cannot see the bottom of the hill or around the corner etc.
34. There is always some scope for a TD to exercise judgment in homologating a race course. However, the FIS Rules and FIS Course Guidelines are quite prescriptive and the discretion

placed on a TD in homologating a course is limited. In this statement, I express opinions on theoretical race course designs, if the Proposal were to proceed. I have sought to indicate where a decision to homologate a course (or not) would come down to a judgement call, and where there is in practice no discretion and a course cannot be homologated.

D.3 Current race course compliance with FIS rules

35. Falls Creek currently has a 3.75km and 5km race course. The 3.75km course incorporates a cut-off to avoid some of the Sun Valley section of the 5km course.
36. At **Annexures E and F** are two “homologation certificates” dated 12 August 2009 from the FIS Cross Country Committee – Subcommittee Rules and Control, for the 3.75km and 5km race courses. Although the certificates states that the homologations are valid until 30 June 2014, these have subsequently been renewed and are listed as valid on the FIS Website.²
37. More detailed course maps showing the current route of the 3.75 and 5km race courses are at **Annexure G**.
38. On each of the 3.75km and 5km courses:
 - (a) Skiers first complete a climb in the vicinity of the Nordic Bowl and Hoppet Start (a B-climb).
 - (b) Skiers then descend to Western end of the Dam Wall at around the 1km mark. This descent would be partially impacted by the road clearing proposed by Falls Creek, primarily due to dirty snow.
 - (c) Skiers then ski the “Boat Ramp” trail, followed by a U-turn onto the Panorama Loop trail in front of the ANARE Shed. This part of the course would become impassable.
 - (d) Skiers then turn left to go up a steep hill behind the ANARE shed (part of a B-climb, with the short steep hill considered part of a C-climb), which would also become impassable, with the construction of the proposed car park.³
 - (e) Skiers descend on the Little Panorama Trail, and return to Panorama Trail in the direction of Sun Valley.
 - (f) From Panorama Corner, skiers on the 5km course complete a loop on the Sun Valley Loop towards the bottom of the Towers Chair, where they turn around and

² Available at <https://www.fis-ski.com/DB/cross-country/homologations.html?place=Falls+Creek&disciplinecode=&nationcode=aus&gendercode=&homid=2115&homologationtype=DET§orcode=CC&homologationlevel=&homologationcategory=&valid=1>

³ C-climbs are not defined in the FIS Rules or FIS Course Guidelines but describe short, steep climbs.

return. This includes three further B-climbs. 3.75km skiers complete only a shortened version of this loop containing one B-climb.

- (g) Skiers then climb up a trail known as “The Pines Lower” to an extension of the Pipeline Trail. This is the sole A-climb on the course.
 - (h) Skiers then descend on McKay Road and take a sharp right-turn onto Bogong High Plains Road and ski south-east along the Bogong High Plains Road. This section would be cleared of snow and not usable.
 - (i) Skiers then turn left onto the Hoppet Start, and then take a left turn onto Horseyard Loop, where they complete the final B-climb of the loop, and ski back along Bogong High Plains Road to the Aqueduct Trail into the Nordic Bowl to complete the lap. Again the Bogong High Plains Road section of the race would be cleared of snow and not usable under the Proposal.
39. The 5km course currently meets the FIS criteria of a Category C (Continental Cup)⁴ level and is homologated for the following reasons:
- (a) the TC is 156 metres;
 - (b) one A-climb with a PTC of 32 metres, which comprises approximately 21% of total climb. This is also the maximum climb. The PHD of this climb is 30 metres;
 - (c) six B-climbs, with a total climb of 92 metres, being 59% of TC (slightly more than the recommended 55%); and
 - (d) total HD of 53 metres.
40. The 3.75km course meets the FIS criteria for Continental Cup Category C, and is homologated for the following reasons:
- (a) the TC is 108 metres;
 - (b) one A-climb with a PTC of 42 metres,⁵ being 39% of TC;
 - (c) 3 B-climbs, with a total climb of 45 metres, being 42% of TC; and
 - (d) Total HD of 53 metres.
41. The third homologated course at Falls Creek was the Sprint course, a 1.4km Continental Cup “Level D” course (**Annexure H**). Unfortunately, because of the earth works in the Nordic Bowl

⁴ Australia and New Zealand Cup is the relevant Continental Cup.

⁵ The A-climb begins 10 metres lower than the 5km course A-climb, and incorporates part of what is a B-climb on the 5km course.

undertaken in 2024 without consideration of the FIS course, this course is now unusable as the start and finish portion has a steep drop-off. Many approaches were made to Alpine Resorts Victoria (trading as Falls Creek Alpine Resort Management Board) and its predecessors (**Alpine Resort Management**) by Snow Australia, the Kangaroo Hoppet and XCSAV prior to the earthworks asking to be consulted before the works were undertaken to ascertain the impact of the works, but unfortunately Alpine Resort Management did not consult with the cross country skiing community to ascertain the impacts, as is the case with the Proposal.

D.4 Impossibility of designing compliant race course if Proposal were to proceed (with road clearing)

42. In my view, it will not be possible to design a compliant Sprint, 3.75km or 5km race course on the Falls Creek cross country ski trails if the Proposal were to proceed. Together with the National Program Director, Finn Marsland, I have assisted to assess proposed alternative race course options put forward by Falls Creek. The only proposal put forward by Alpine Resort Management is provided in Figure 2 and was provided by Alpine Resort Management in 2022. There has been no discussion with Alpine Resort Management about alternative race courses since then. I have added letters A through K to the map to better describe the course.

Figure 2: Annotated Proposed 5km FIS Course from Falls Creek



43. In brief, the proposal would have skiers take the following route:
- (a) Skiers ski up from the Nordic Bowl (A) to the top of Hoppet Start (B).
 - (b) Skiers turn left to go down what was previously the first climb on the old course, then complete a short loops to return to the top of Hoppet Start (C). I am not sure exactly what trails would be used in this location.
 - (c) Skiers descend alongside the cleared road onto the Boat Ramp trail (D), as on the current 5km course, save that they will be alongside a two-way cleared road.
 - (d) Instead of taking a sharp right in front of the ANARE Shed, skiers climb from E up a new trail to the upper part of Panorama Loop (above Panorama Corner). This trail might be the site of a single-track mountain bike trail and otherwise has thick heath. Whatever the situation the bike trail is not suitable for use as a cross country

ski trail and a ski trail in this location would require further work (including vegetation removal and probably earthworks) to convert it to a cross country ski race trail.

- (e) Skiers descend to Panorama Corner, then complete the same loop as is undertaken on the current 5km course towards Sun Valley (F).
- (f) Skiers complete the same A-climb on The Pines (Lower) as on the existing 5km course.
- (g) At the end of The Pines (Lower) skiers take a sharp left (G) to ski up Tank Hill towards two water tanks and ski onto Pipeline Track.
- (h) Skiers take a sharp, downhill, right-hand descent onto McKay Road (H).
- (i) Skiers will undertake a short loop (I) outside a shed used by AGL Hydro, before descending part of Panorama Trail to a new trail back down to the lower Panorama Trail near the ANARE shed (E). This trail might be the site of a single-track mountain bike trail and otherwise has thick heath. Whatever the situation the bike trail is not suitable for use as a cross country ski trail and a ski trail in this location would require further work (including vegetation removal and probably earthworks) to convert it to a cross country ski race trail.
- (j) Skiers will then, for the next 400 metres, pass alongside cleared road, passing in front of the ANARE shed, then next to the proposed carpark (J), then alongside Bogong High Plains Road to the top of Hoppet Start.
- (k) Skiers descend the Hoppet Start back into the Nordic Bowl (K).

44. Based on this document, I am not able to determine compliance with each of the criteria as I have done so in paragraphs 39 and 40 above, given the lack of gradient measurements, and other input data required when performing calculations (including as set out in the “Design of Downhills” section of the FIS Course Guidelines).

45. However, I consider that the course, as proposed could not be homologated for the following reasons:

- (a) The descent at point B would be fast and over an existing heathy area, which would cross two tracks frequently used by members of the public seeking to access the Dam Wall and Sun Valley. However, there seems to be scope to improve the design here to mitigate the issue.
- (b) On race day, skiers start races at different times, with the elite skiers going last. Races are also 10, 15 or 20 kilometres which means that skiers complete the race course loop 2, 3 or 4 times. This means that part of the section alongside Bogong

High Plains Road (to the north of the proposed car park) would need to be two-way, and would need to be more than 12 metres wide to provide for a six-metre wide track in each direction, plus markers in the middle of the track to separate skiers and on the outside of the track to seek to prevent skiers from skiing off the edge of the berm (rule 311.2.6 – the current course is Category C), plus a buffer from the road. This is especially so in skating races where uphill skiers require more space than in classic style races. Figure 3 shows that the total width of the road through to the current location of the sign on the side (beyond which there is a drop-off) is only 9 metres wide. A photo (Figure 4) taken by a member of the Association of the same spot demonstrates that even with the road only partially cleared, there is only room for one climbing skater to ski, with overtaking unlikely to be possible given the close proximity to the road.

Figure 3: Descent on Bogong High Plains Road showing current maximum width



Figure 4: Bogong High Plains Road near proposed carpark



- (c) In my experience, the area at E (near the ANARE shed) is steep and untested for racing, and often has cornices/drifts due to snow blowing in. I understand there is an area of open drain and a large concrete culvert here. In any case, I would make an adjustment to the course and have it continue on the existing road between E and F, so I do not consider this to be a fatal flaw.
- (d) The corner at G will be unacceptably sharp. While I cannot determine its strict compliance with the FIS Course Guidelines (section “Design of downhills”) I have skied this trail many times and know it to be fast. A skier who overshoots the corner (which happens relatively frequently in ski races) would enter a different part of the course and would be at risk of crashing into skiers going the other direction.
- (e) Similarly, the corner at H is a totally unacceptable acute corner, on a downhill. The area is narrow and surrounded by trees and steep slopes. It also has a reverse camber which makes cornering more difficult. Further, the road features members of the public skiing at high speeds on cross-country skis, and if the Proposal proceeds, is likely to be used by downhill skiers who wish to ski from Wombats Ramble (within the dedicated downhill ski run) to the ANARE Shed and car park, possibly because they have parked there for the day. Indeed, the presence of downhill skiers on what are now cross country trails is consistent with the intention of the current General Manager of Falls Creek, who has stated that “Long term, the resort envisages more parking at the Lakeside... the southern facing slopes will become increasingly important for the long term viability of the resort. This will

similarly necessitate a requirement to provide day parking in this vicinity and the potential for new lifting infrastructure in this area.” (**Annexure I**).

- (f) The loop at point I could work in theory, although I recall there are numerous boulders in the area which could present a safety risk, or at least make grooming difficult in low-snow conditions.
- (g) The sharp descent and sharp left corner at E could be dangerous, particularly with pedestrians in the area from the nearby shed. It would also require consideration of uphill athletes to ensure those who overshoot the corner do not collide with other skiers.
- (h) The section where athletes proceed past the ANARE Shed and carpark, along the proposed berm, would be subject to dirty snow, pedestrian intrusion from those who want to snow play next to their cars and wander off, vehicle spray and potentially vehicles who have left the road in slippery conditions. It is not appropriate for a ski race course, and I have never seen a homologated FIS course which has such a long and close interface with a road. Further, it would need to be six metres wide (rule # of the FIS Rules), slightly more than the five metres indicated on drawing FCRM99-106 (part of the permit application).
- (i) The final descent into the Nordic Bowl (K) would be acceptable with minor adjustments to break up the descent and reduce skier speed.

46. My view is supported by the National Program Director for Snow Australia, Finn Marsland, who expressed Snow Australia’s position on the lack of an identified alternative course. This was expressed in a letter dated 7 August 2023 (**Annexure J**).

E. IMPACT ON KANGAROO HOPPET

E.1 Introduction

47. The Kangaroo Hoppet is Australia’s international cross-country ski marathon. It regularly has over 1000 entrants across the three different race distances (42 kilometres, 21 kilometres and 7 kilometres). In 2022 (the last time the race was held), it had 945 entrants, but had 1070 entrants in 2019 and 1052 entrants in 2018.⁶ This includes many families or other groups where all or most of the family or group compete in one of the race distances. The Kangaroo Hoppet organisers also ascertained from their own research that those racing frequently bring up other people to Falls Creek who do not themselves enter. In addition, the Kangaroo Hoppet receives extensive support from local community volunteers, as well as logistical and financial

⁶ Entrant numbers are available by viewing the “Event Summary” under each year’s results page, available here: <https://www.hoppet.com.au/hoppet-results/>.

support from Alpine Resort Management. The 42km event has been held since 1991. It has been held every year since, except in 2023 and 2024 when historically poor August snow conditions forced the race's cancellation.

- 48. I raced in the first Kangaroo Hoppet in 1991 and have skied 13 Kangaroo Hoppet races. I have also skied the 21km Australian Birkebeiner nine times and won the women's event in 1993 and 2000.
- 49. I have been the appointed TD five times for the Kangaroo Hoppet and have been Chief of Race since 2023.
- 50. The Kangaroo Hoppet is a member of the Worldloppet Ski Federation, which currently encompasses 18 races in 18 different countries on five continents. The Kangaroo Hoppet's membership of Worldloppet brings significant attention to the race and economic benefits to Falls Creek and nearby communities.
- 51. American professional skier Jessie Diggins visited Falls Creek in 2022 with a small team, winning the Kangaroo Hoppet and spending time training at Falls Creek. She regularly posted about Falls Creek to her significant Instagram following. Jessie went on to win the FIS Gold Globe in 2023 and 2024 (overall World Cup titles) after her trip to Australia. The Hoppet has also brought other international teams and individual athletes to visit, each of whom contributes to raising the profile of Falls Creek as a cross country ski destination.
- 52. As of 2024, the Kangaroo Hoppet is a Ski Classic Challenger event. Ski Classic events are live streamed to a vast and expanding international audience. This coverage will bring incredible exposure to skiing at Falls Creek. Ski Classic Challenger events are important to the professional teams as the teams can collect very important individual and team points from racing. Stars of the Ski Classic professional teams have already been making approaches to plan to come to the Kangaroo Hoppet. These include World Champion and Olympic gold medal winning athletes.

E.2 Requirements of Kangaroo Hoppet Course

- 53. The Worldloppet Ski Federation requires its races to comply with the requirements of the FIS Rules as they apply to "Popular Cross-Country Competitions". Popular Cross-Country Competition is defined in Rule 380.1 of the FIS Rules. Alpine Resorts Management has not had any discussions with the Association, Snow Australia and the Kangaroo Hoppet regarding the impact on the Kangaroo Hoppet apart from stating that the Proposal would not affect the running of the race, and have not discussed any alternative race courses with the Kangaroo Hoppet or the Association, or people responsible for running the race, as far as I am aware.
- 54. Rules applicable to these competitions are set out in Part G of the FIS Rules.

55. The requirements for a race course for a Popular Cross-Country Competition are different from those applicable to a FIS course, in that there is no requirement for particular climb grades to be included. One relevant rule from the FIS Cross-Country Rules is extracted below:

384.2 Start Area

384.2.1 The start area should be flat or nearly flat. It should lead directly into the course and be wide enough to avoid excessive crowding. The start should gradually narrow to the width of the course over a distance sufficient in length to allow competitors to spread out before entering the tracks...

56. Rule 384.4.3 of the FIS Cross-Country Rules provides that for freestyle races (of which the Kangaroo Hoppet is one), the course should be wide enough to allow competitors to ski side by side. This typically requires a six metre course width, although a wider course is necessary in the early stages of the race.

57. The FIS Course Guidelines also contain specific requirements for mass start races (not just popular races). These include, in section 4:

For free technique competitions, the course width and alignment should be as such that three competitors should be able to ski side by side in all critical parts of the course without interfering with each other.

The start area must be wide and long enough to allow for starting up to 150 athletes at the same time. The slope of the start corridors should be minimized to allow for the competitors to remain still prior to the start.

Congestion points, including sharp transitions from downhills into uphill, narrow sections, and long and steep C-climbs, must be avoided. Narrow sections resulting from a bridge, tunnel, or landform restriction may be included provided that these are not located at a decisive part of the course. Highly technical downhills should not be located before the first significant climb.

58. If a race course is not wide enough, especially at and near the start, there is the potential for crashes to occur, which can be dangerous for cross-country skiers. Such danger may be demonstrated by injuries suffered by one athlete who fell in a mass start sprint race at Falls Creek, and whose lung was punctured by the tip of another competitor's ski which passed between his ribs.

59. As a technical delegate, I pay particular attention to ensuring that the course does not have congestion points which would "funnel" skiers into too-close proximity, especially at the start and close to the start where there are more skiers close to each other jostling for position. This is particularly important for the Kangaroo Hoppet, which includes a downhill section on Bogong High Plains Road and into Panorama Loop. This part of the course is intended to be cleared of snow if the Proposal is to go ahead.

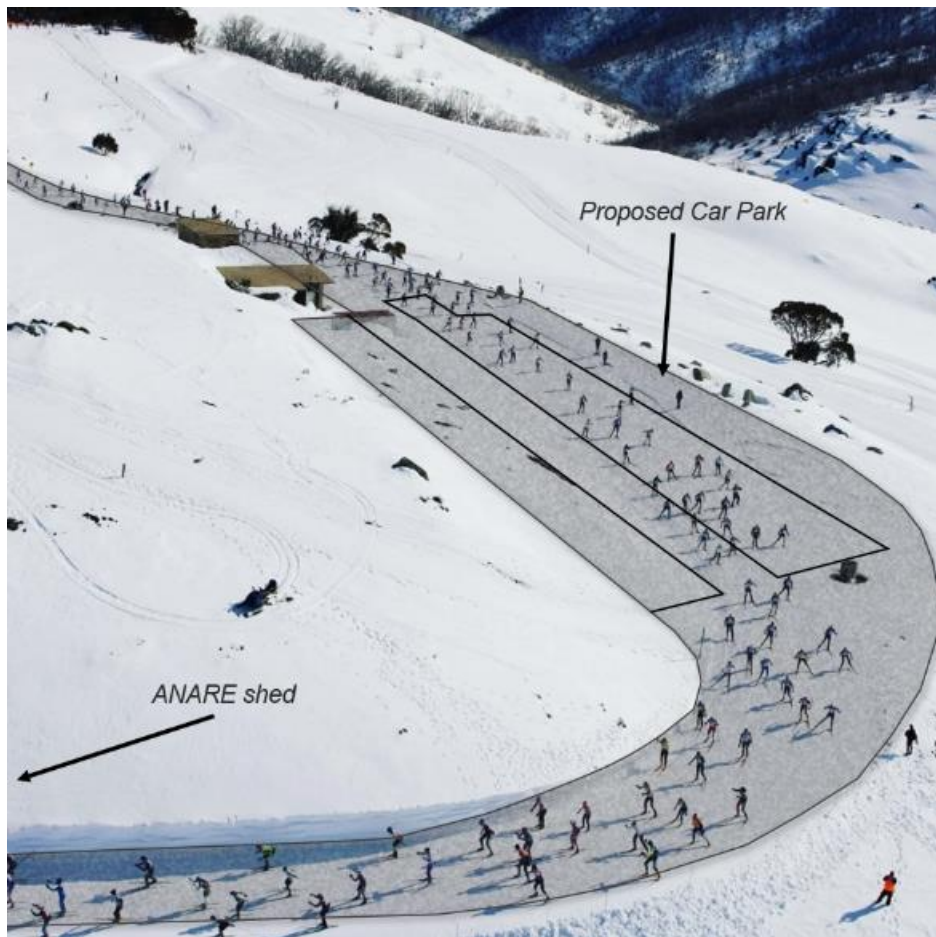
60. The existing Hoppet start area is ideal to start mass start freestyle races as it wide, slightly up hill and is wide enough to accommodate the anticipated number of participants, to give each of them a fair and equal chance (i.e. without one side of the start area being more favourable than another) and to enable the start to take place smoothly. The start gradually narrows to the width of the course over a distance sufficient in length to allow competitors to spread out before entering the tracks and without creating bottlenecks.
61. The existing start also meets other requirements of the FIS Rules and FIS Course Guidelines, in that the start area is adjacent to the finish area, which means no transfer of warm clothing is required. Further, the Hoppet start and Nordic Bowl are sheltered from extreme weather conditions, which ensures a safer race.
62. The 21km, 42km and Joey Hoppet have staggered start times (10 minutes apart) but because of the different speeds of the racers all of the competitors are on the course at the same time. All racers leave Hoppet start and proceed on to the Bogong High Plains Road past the proposed carpark (see Figure 5), past the ANARE shed and out into Sun Valley. After approx. 7km skiers return past the ANARE shed with the 42km and 21 km races proceeding across the dam wall out to the Bogong High Plains. The Joey Hoppet heads back to the Nordic Bowl. The 42km race uses the same trail past the ANARE shed from the Hoppet Start on its second lap, and uses the Boat Ramp trail.

Figure 5: Kangaroo Hoppet lead pack on site of proposed carpark



63. Each race distance runs through the proposed carpark area and past ANARE shed. The width of track is very important in this area as it close to the start and many skiers are vying for position. The below photo (Figure 6) shows the current extent of the course (at a comfortable width) and the width of the planned carpark by comparison. I note that this image is likely of recreational skiers, rather than the leading pack which tends to bunch up at a much higher speed in this area.

Figure 6: Cleared road and carpark superimposed on early section of Kangaroo Hoppet Course



64. The below photo (Figure 7) shows the amount of space skiers require on an uphill climb early in the race – it is taken just beyond the ANARE shed. To the left of the skiers, is the downhill, return track. Later on in the race, both tracks are used simultaneously.

Figure 7: Kangaroo Hoppet skiers climb towards Panorama Corner



65. If the proposed carpark and ANARE proposal was to proceed, it would not be possible to hold the Kangaroo Hoppet event because there is currently no viable alternative to the Hoppet start area and terrain to allow the athletes to safely head out into the Sun Valley Loop. At the moment, competitors head out from the Hoppet start along the observation deck (Panorama Loop) which is the site of the proposed car park. The proposed berm, at between 12 metres – 5 metres is not wide enough, especially when there is a steep drop off at the edge of the berm. Two-way traffic is not allowed on race courses for safety reasons. All FIS races including the Kangaroo Hoppet require a Licenced FIS TD. It is their responsibility to sign off on the course. I do not believe any TD would consider it a safe option if the current ski trail were not available.
66. I have considered alternatives to using the observation deck (Panorama Loop) (for example by using the Bogong High Plains Road and Boat Ramp trail). But in my opinion, a TD ought not to hold a race on a course as narrow as the Boat Ramp trail (which would also require 2 way racing similar to that shown in figure 7 as the observation deck (Panorama Loop) could not be used for racing). My understanding is that the Boat Ramp trail is approximately 8 metres wide. To allow for two directions of race the race would need a minimum width of 16 meters:

- (a) The outwards course would require minimum 9 meters to safely allow competitors to proceed – at this point in the race as the field would have just left the start area and width is very important for safety and fairness.
 - (b) The return part of the course (would require a minimum of 6 meters. In the return track it would be normal to have the elites returning from the second loop of Sun Valley and overtaking slower competitors from all the races on their first lap of Sun Valley. That is, it is not possible to plan for two-way running on the basis that racers have already finished using a part of the course.
67. The area of the Bogong High Plains Road, the “observation deck” (site of the proposed carpark for the Proposal) and area in front of the ANARE shed provides the ideal start for a Worldloppet popular race. Without this wide trail (which I understand will be as narrow as five metres wide in front of the shed, according to the plan FCRM99-106), it would be impossible to provide a safe and fair event.
68. I understand that the Hoppet organisation has spoken with other FIS Licenced TDs who have officiated at previous editions of the Kangaroo Hoppet, about the impact of the proposed road clearing to the course at the start of the event. All were of the opinion that road clearing will create conditions that are incompatible with the requirements of the FIS Rules and would not provide for providing safe and fair skiing conditions. It is not possible to run a FIS race without the approval of a Licenced FIS TD.
69. As a TD, I have additional concerns with any proposal to route athletes at the start along the proposed berm. The berm described in the proposal would not be wide enough to safely allow the athletes to ski. The snow quality would also be a concern with snow cleared from the carpark being contaminated with grit, stones and salt. The proposed berm would have a steep drop off on the left and this would cause a safety issue. Fencing the drop off is not a viable option as the small holes in the fence's material would also be a danger catching ski tips and poles.
70. Finally, the main means of access to the Hoppet Start is by competitors walking or skiing from the car park at Windy Corner along Bogong High Plains Road. I understand pedestrians will not be permitted on Bogong High Plains Road if cleared, meaning that access to the course for 1000+ people will be difficult.

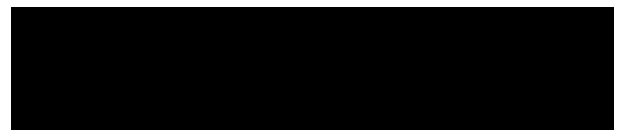
F. CONCLUSION: BROADER REPUTATIONAL DAMAGE TO FALLS CREEK ALPINE RESORT

71. I believe that the impact of the Proposal would significantly affect the reputation of Falls Creek as Australia's premier cross country ski destination, and indeed a destination of international renown. This reputation is influenced by the following factors which play in Falls Creek's favour:

- (a) relatively expansive trail network;
- (b) unique Australian Alpine scenery;
- (c) ski-in, ski-out access from the village;
- (d) high altitude, ensuring generally reliable snow;
- (e) contrast of sheltered, local trails and spectacular, above-the-treeline outer trails;
and
- (f) total lack of cleared roads which interrupt the flow of trails.

72. I have skied in dozens of countries through my professional racing career, as a TD and as a recreational skier. The experience at some famous destinations (Davos in Switzerland, Ramsau am Dachstein in Austria) is significantly depleted by the frequency of road crossings, even though those roads are generally very quiet. By contrast, destinations in the USA usually do not feature road crossings, which I understand is because of safety practices there, nor do places like Canmore in Canada and Seefeld in Tirol, Austria. The existence (or not) of road crossings is a significant factor in the overall reputation of a cross country ski destination.
73. The Proposal, including the clearing of Bogong High Plains Road, would in my view lead to no FIS races taking place, nor would the Kangaroo Hoppet be able to run. In my view, a significant number of international skiers would choose to travel to competitor venues, in particular The Snow Farm in New Zealand, home of New Zealand's World Loppet race, the Merino Muster. I consider this to be an unacceptable impact on one of Falls Creek's most significant tourism products, regardless of (unproven) benefits which might arise if an operator were found for a café in the Lakeside precinct in the "green season".
74. This is separate from the impact the Proposal would have on recreational cross country skiers, which has been expressed to me by many dozens, if not hundreds, of members of the cross country skiing community. The severing of the inner trail network and the loss of a significant portion of the Falls Creek trails, combined with the introduction of numerous road crossings to the network, would do immeasurable harm to the network.

The evidence contained in this witness statement is true to the best of my knowledge and belief.



Sandra Paul

Dated: 24_ September 2024

Place: __Clapham Hill London__