SUBMISSION TO
DRAFT VARIATION TO LICENCE AREA PLAN
FOR LITHGOW RADIO
File Reference 2005/2174

From
MEDIA CORPORATION AUSTRALIA LIMITED
Background

Radio stations 2LT and 2ICE have been licensed to operate in the Lithgow region of New South Wales. The two radio stations are licensed to Media Corporation Australia Limited (MCAL).

The Australian Broadcasting Authority (ABA) (now merged to form the ACMA) is the Government body charged with the responsibility of, inter alia, planning for and administrating the broadcast spectrum. The Minister responsible for the ABA is the Minister for the Department of Communications, Information Technology and the Arts.

In 1999, The Minister for Communications directed the ABA to undertake various Licence Area Plan studies in the Sydney region to determine which additional FM frequencies could or should be made available for potential new FM services.

In the Sydney Licence Area Plan (LAP) released on 30 August 1999 the ABA announced a change to the 2ICE operating frequency in the Lithgow region from the existing frequency of 95.3 MHz to the proposed frequency of 107.9 MHz.

The sole reason for this change of frequency was to make available the 95.3 MHz frequency for a new Sydney wide commercial FM radio service.

Media Corporation reluctantly relinquished the 95.3MHz frequency and incurred significant costs of moving to a new frequency.

At the same time, the ABA proposed that radio stations 2ICE and 2LT be granted an extension of their current licence areas to include the Blue Mountains. These additional areas are located to the eastern end of the current Lithgow licence area.

To service this increase in licence area, the ABA proposed two additional frequencies being 99.5 MHz and 783 kHz.

The additional coverage areas proposed by the ABA for the AM and FM services differed in size and are outlined in Table One below.
The proposed additional coverage area for the 783 kHz AM licence mirrored exactly the same collection districts as the licence area for Katoomba RA1 in the Blue Mountains region. The Katoomba RA1 licence area is the licence area that is serviced by 2ONE FM. The licence area for the 783kHz service has the Nepean River as its most easterly boundary.

The proposed additional coverage area for the 99.5 MHz licence is significantly smaller than that for the proposed AM service as shown in the Table One above. The proposed additional coverage area for the 99.5MHz service ran in a narrow geographical band adjacent to and parallel to the Great Western Highway. The town of Woodford is at its most easterly boundary.

Table One shows that there is a significant discrepancy in size between the coverage areas of the 783kHzAM service and the 99.5 MHz FM service. The AM service area is at least twice the size of the FM service area.

The 1999 press release from the ABA stated:
“In Lithgow, the ABA is proposing that the existing commercial FM radio service, 2ICE change frequency, to accommodate a second new commercial radio service in Sydney. It is also proposing an extension to the licence areas of the two Lithgow commercial radio services 2LT (which operates on the AM band) and 2ICE to include parts of the Katoomba region”.

The extension to the existing 2ICE and 2LT licence areas effectively meant that these two stations would now be licensed to compete directly with Katoomba station ZONE-FM in the Blue Mountains region. Up until this time, ZONE had been the only commercial radio station licensed to service the Blue Mountains.

On 5 July 2004, Media Corporation wrote to the ABA and highlighted the following in its submission:

“The Draft Report dated 15 June 2004 highlights the problem that presently exists whereby it would seem that the Lithgow RA1 and RA3 licence areas are geographically different.

In May 2001, Media Corporation Australia Limited (formerly Midwest Radio Network Limited) made a submission to the ABA requesting an ‘equalisation’ of these two licence areas. A request was sought to bring the RA3 Licence area in line with that of RA1.

This request was made on the basis that there is a very strong ‘community of interest’ between the people living in RA1 and those in RA3. There is only one arterial road through this region with the Great Western Highway snaking its way from the upper Blue Mountains to the lower Blue Mountains. This is a major arterial route with thousands of people travelling the Great Western Highway daily to work.

It would seem disingenuous to the people living in this geographical region to allow them to have access to a local AM radio service covering matters of important local significance whilst at the same time denying them access their own local FM service. This would certainly disadvantage a great number of people living in this region.

It would seem that the ABA has previously acknowledged that there is a strong ‘community of interest’ between the Lower Blue Mountains and the Upper Blue Mountains as the licence area that was previously granted for Katoomba RA1 covers all of this area and much more to the east of Penrith.

It is important to also note that this geographical region of the Blue Mountains has Australia’s highest bushfire risk. Major bushfires in the Blue Mountains have in the past claimed many innocent lives. Experience has taught us all that when major bushfires threaten, the local radio station is the most sought after source for immediate information about the locality of bushfires.

It would therefore seem very foolish and highly irresponsible indeed to have an AM service covering the entire bush corridor right down from the upper Blue Mountains to the lower Blue Mountains whilst having an FM service that stops half way at Lawson only covering 50% of the bush corridor.
Any decision not to equalize the 2 licence areas could have a potentially devastating effect on people living in the lower Blue Mountains in the event of a major bushfire.

If the ABA agrees to grant the move from an AM frequency on 783kHz to an FM frequency on say 101.1 MHz, it is very important that people living in the lower Blue Mountains be able to access this local radio service.

The Blue Mountains is the Blue Mountains. People living in this area don’t differentiate between the Upper Blue Mountains and the Lower Blue Mountains.

It is interesting to note that on the ABA website, the ABA shows RA1 as being the official licence area for both the 2LT and 2ICE services.

Media Corporation Australia Limited therefore seeks approval from the ABA to bring the RA3 licence area totally in line with RA1.”

The submission (above) made to the ABA on 5 July 2004, clearly outlined a number of very relevant issues:

1) That there is a very strong ‘community of interest between the Upper Blue Mountains and the Lower Blue Mountains.
2) It would seem disingenuous to the people living in this geographical region to allow them to have access to a local AM radio service covering matters of important local significance whilst at the same time denying them access their own local FM service. This would certainly disadvantage a great number of people living in this region.
3) It is important to also note that this geographical region of the Blue Mountains has Australia’s highest bushfire risk. Major bushfires in the Blue Mountains have in the past claimed many innocent lives. Experience has taught us all that when major bushfires threaten, the local radio station is the most sought after source for immediate information about the locality of bushfires.
4) It would therefore seem very foolish and highly irresponsible indeed to have an AM service covering the entire bush corridor right down from the upper Blue Mountains to the lower Blue Mountains whilst having an FM service that stops half way at Lawson only covering 50% of the bush corridor.
5) The Blue Mountains is the Blue Mountains. People living in this area don’t differentiate between the Upper Blue Mountains and the Lower Blue Mountains”.

‘Practice and Custom’ in the past has meant that AM licensees who were granted s39 FM services had ‘identical’ AM and FM licence areas. The 2ICE and 2LT service area extensions into the Blue Mountains are merely extending the original licence area and there is no justification for the licence areas to differ.

Table Two outlined below is the approved licence area for 2ONE-FM (Katoomba RA1).
To achieve the increase in licence area for the 2LT AM service, the ABA amalgamated the existing Lithgow licence area with the new licence areas in the Blue Mountains. This new aggregated area is referred to as Lithgow RA1 and is outline in Table Three below. This enlarged licence area now covers all of the previous Lithgow licence area plus both the Upper and Lower Blue Mountains regions down to the Nepean River.
To achieve the increase in the licence area for the 2ICE FM service, the ABA proposed the licence area as outlined in Table Four. This licence area called RA3 covers only the upper Blue Mountains through to Woodford in the east.

It is very important to note that there is a significant difference between the Lithgow RA1 licence area for the AM service and the Lithgow RA3 licence area for the FM service in the eastern sectors. Whereas the Lithgow RA1 licence area for the 2LT AM service has a coverage across both the ‘Upper’ and ‘Lower’ Blue Mountains right down to the Nepean River, the Lithgow RA3 licence area for the 2ICE FM service covers a much smaller geographical area solely covering the Upper Blue Mountains region.
Table Four

It is very important to note however that whilst the eastern boundaries of the 2ONE, 2LT and 2ICE service areas are different, the western boundaries in the areas around Mt Victoria in the Blue Mountains are identical.

Over the past 4 years, Media Corporation Australia Limited (the licensee of 2LT and 2ICE) has worked co-operatively with the ABA in facilitating the transfer of the existing 95.3 MHz to allow this frequency to be auctioned and used in the Sydney market.

This 95.3 MHz frequency was located in a favourable position in the middle of the FM band. By giving this frequency back to the ABA (for use in the Sydney region) 2ICE had to move its frequency to the very unfavourable 107.9 MHz frequency, being the last FM frequency available right at the end of the FM band. This move of frequency was made at great cost to the company.
Had Media Corporation Australia Limited not worked in such a co-operative manner with the ABA and agreed to this transfer of the 95.3 MHz licence, this licence would not have been available for use in the Sydney market. This 95.3 FM licence was ultimately auctioned in 2004 by the ABA and generated a price in excess of $100 million for the Government.

Despite giving up this licence for auction in the Sydney market, Media Corporation has not been able to benefit by getting the new AM and FM licences to air. There has been a significant level of frustration in not being able to achieve what the ABA originally granted to Media Corporation. Again, these significant delays have had a commercially damaging impact on the company.

New information to hand from the ABA proves conclusively that the original specifications provided for the FM service by the ABA would not provide a suitable level of coverage for the Blue Mountains region.

Since the LAP determination in 1999, Media Corporation Australia Limited has been seeking a suitable transmission site for its two new proposed Blue Mountains services. The original site nominated by the ABA in the LAP was proven to be impractical. This had been communicated to the ABA on a number of occasions.

Suitable broadcast sites in the Blue Mountains are extremely difficult to find and virtually impossible to build. This is due to the desire of the local council to maintain the mountains natural and pristine habitat avoiding any additional visual skyline pollution. It has been made very clear that no new transmission towers will be approved.

In the early part of this process, Media Corporation believed that they had found a potentially suitable site for the 2ICE FM service at the Air Services facility at Kings Tableland. Media Corporation negotiated a lease and paid the land owner a long term (25 year) lease fee.

Due to its new proposed location, it was found that the FM service required additional power if it was to suitably service the western parts of the licence area. The ABA considered a submission from Media Corporation to change the previously approved technical operating conditions of the FM service. Previously, the 2ICE service had approval for a 200w omnidirectional pattern. After seeking engineering advice, the ABA recognised that a power of at least 2kw would be required in the westerly direction towards Katoomba if a suitable signal was to be provided. The ABA subsequently provided conditional approval for a 2kw directional array from the site towards Katoomba with a 200w null towards Sydney. This was approved at a height of 30 metres.
The ratio of 2 kilowatts west to 200 watts east represented ‘worlds best practice’ ten to one front to back power ratio for the proposed antenna.

MCAL purchased suitable transmission equipment for this site and began plans to commence broadcasting. During the planning process, Air Services Australia advised Media Corporation that there had been a change to their internal policy which now prohibited the transmission of radio signals from certain Air Services site towers. The Kings Tableland site (where the service was proposed to broadcast from) was particularly sensitive as it was the main international communications site for aircraft in the Sydney basin.

After two years of extensive planning and negotiations, Media Corporation was forced to abandon the Air Services site at Kings Tableland and seek another broadcast site for the 2ICE FM service. This has been made particularly difficult due to the very limited number of available broadcast towers in what is a very sensitive region.

The only other potentially available site is the 2ONE tower at Wentworth Falls which is located less than two kilometres from the Air Services site at Kings Tableland. The new Wentworth Falls site offers no material signal advantage over the Air Services site to the West, but significant disadvantage to the east. This is because of tower congestion with the antenna being located mid-way up the tower with both the tower and the 2ONE array being behind our antenna to the east. This will have a negative impact on signal to the east.

MCAL has been successful in negotiating a commercially viable lease for the site however due to significant congestion on the tower, the antenna cannot be located less than 65 metres in height. Media Corporation engaged an in-depth engineering study on this tower to determine what other options (if any) there were available. This engineering study showed that the only available location for an antenna is at the 65 metre mark of the tower.

Whilst Media Corporation Australia Limited has been trying to find a suitable site for the 2ICE FM service, it has yet to find a suitable site for its 2LT AM service (783kHz). AM broadcast sites require significant additional land area than FM transmission sites and despite extensive searches over the past 4 years, no suitable site in the approved licence area has been found. As a result of its inability to find a suitable transmission site for its AM service, Media Corporation Australia Limited wrote to the ABA on 16 April 2004 seeking approval to move the proposed AM service from the AM band to the FM band with the intention that this additional FM service would transmit from the 2ONE site at Wentworth Falls.
After extensive engineering work was undertaken, a number of potentially available FM frequencies were submitted to the ABA for consideration. On 23 August 2004, the ABA wrote to Media Corporation advising them that they had considered the request to transfer the AM service to an FM service and gave approval to test three potential FM frequencies (91.7MHz, 93.3MHz and 101.1MHz).

To ‘test’ these three frequencies (in addition to getting the existing approved 99.5FM frequency to air) permission was needed to be sought from the ABA to increase the approved height of the antenna on the 2ONE transmission tower at Wentworth Falls from the approved 30 metre level to the proposed 65 metre level.

Media Corporation Australia Limited wrote to the ABA on 30 August 2004 seeking approval for this increase in height. To date, no approval has yet been received.

Throughout this 4 year ordeal, Media Corporation has kept the ABA fully informed of the problems it has been encountering with the launch of these two new licences.

In response to Media Corporations request for a change to its Technical Operating Conditions for the 99.5MHz service, the ABA (now called ACMA) released a “Daft Variation to Lithgow Radio Area Plan” in September 2005.

This draft plan proposed an increase in the height of the antenna from 30 metres to 60 metres. Furthermore, the draft plan proposed a variation of the maximum effective radiated power from the proposed 2KW to 1KW.

At no stage before the release of this draft plan in September 2005 had the contents been discussed with Media Corporation Australia Limited.

Quite to the contrary, Media Corporation had been led to believe that its request for an increase in height would be approved with no material changes to the proposed effective radiated power.

Subsequent to the release of the draft report, Media Corporation has sought information from the ABA to understand its reasoning behind the changes that it has proposed. The ABA has subsequently forwarded to Media Corporation a copy of a document entitled ‘Engineering Analysis Report’.

Because of the deadlines for response to the draft report, Media Corporation has been given very little time to study and evaluate the contents of this report. There are however a number of conclusions that
have been made by the ABA that Media Corporation wishes to dispute.

From reading the Engineering Analysis report, we would like to make the following points:

1) The area to the west of Wentworth Falls is typical of most mountain range sites with deep valleys and peaks. The majority of the populated areas in the Blue Mountains sit in a narrow range to the east and west of the Great Western Highway. The Great Western Highway follows the ridge line with a significant amount of housing being built in the valleys either side of this highway.

2) Due to the rugged terrain and the fact that many houses are located in these deep valleys, the ABA previously acknowledged that an effective radiated power of at least 2KW would be required to adequately provide a serviceable FM signal to these residents.

3) Despite these previous statements from the ABA regarding the ‘quantum’ of power required to provide a suitable coverage to these hard to reach areas, the recent draft report released by the ABA recommends a 50% reduction in the effective radiated power from 2KW to 1KW.

4) There are only two commercial FM radio stations licenced to service the Blue Mountains. These are 2ONE FM and 2ICE FM. 2ONE already broadcasts from the same Wentworth Falls site at an approved antenna height of 65 metres. 2ICE plans to broadcast from this same tower at an identical height. The approved licence for 2ONE provides for an effective radiated power heading in the westerly direction from the Wentworth Falls tower of 5KW. The ABA has previously acknowledged that 5KW is the ‘required power’ necessary to deliver an ‘adequate’ FM signal coverage to the western section of the 2ONE service area.

5) We argue therefore that the ABA has established a significant precedent by granting the licensee of 2ONE a power of 5kw in the westerly direction from the Wentworth Falls site. The 2ICE FM service will be sited at the same location, on the same tower and at the same height as the 2ONE antenna. We therefore query why the engineering assessment conducted by the ABA now states that only 1KW of power will be required in this westerly direction from the Wentworth Falls site for the 2ICE service, whereas some 5KW has already been granted for an identical service, being the 2ONE service.

6) Where is the consistency and equity in this decision? If there are only two commercial FM radio station licences to cover the Blue Mountains, surely they must be placed on an equal and level playing field and allowed to compete fairly with the same power...
and potential coverage in the approved licence area. We argue strongly that an effective radiated power of 1KW will not adequately service all of the people in the 2ICE FM service area, especially those residents in the lower valleys. This region is highly sensitive and prone to annual bush fires. It is incumbent upon the ACMA to ensure that ALL residents receive an adequate radio signal from the approved radio licensee.

7) It has been clearly demonstrated that the western licence areas of 2ONE and that of 2ICE are identical. There is no justification for different technical operating conditions between two services operating from exactly the same tower location and with identical boundaries to the west (the direction in question).

8) At no time during the lengthy and documented discussions with the ABA did the ABA consult with Media Corporation Australia Limited regarding a reduction in output power from the Wentworth Falls site or any changes to the 2kw directional array (DA).

9) Media Corporation has only been granted access to the engineering report ‘after’ the proposed changes to the technical operating conditions had been released for public comment. This engineering report makes some significant ‘assumptions’ and ‘recommendations’, many of which we disagree with and dispute.

10) Importantly, this engineering report ‘recommends’ a change from 2kw DA to 1kw DA, however the report noted;

“modelling had not been done at 1kw”

11) Despite not having undertaken modelling at 1KW, ACMA in its draft for public consultation recommends this revised specification. Is it not reasonable to expect that prior to public consultation that regressive changes to a licensees technical operating conditions should have been modelled?

12) Furthermore, the ABA has previously established (via the granting of the licence conditions to 2ONE with the same western boundary as 2ICE) that 5kw of power is required to provide an ‘adequate’ service. The 2ICE service will be sited at the same location, on the same tower and around the same height as the 2ONE antenna.

13) There can be no justification for two services with the same western licence area boundary, broadcasting from the same tower to have different technical operating conditions if they are to equally provide service to the same market area. To vary the licence conditions between two services denies the listeners of these services with equal quality and coverage. Clearly this has commercial implications, with one broadcaster receiving a significant benefit over another, even though both are licenced
for the same geographical region. Furthermore, communities of interest become fragmented if the entire community of interest – in this case the Blue Mountains – is not served adequately.

14) From a purely commercial standpoint, we ask why one licensee should have a distinct power advantage over another licensee covering exactly the same region. This is unfair and will deny an equal coverage to residents from both services.

15) The Blue Mountains is a particularly sensitive region and is prone to some of the world's worst bush fires every few years. In most cases, the local radio station is the only source of information about these bush fires when they are descending on the region. Due to the fact that many homes are located in deep valleys either side of the Great Western Highway, it is imperative that ALL of these homes are able to receive a good strong radio signal. Lives are at risk here every few years and the residents of this region depend heavily on good access to communications. The proposed decision by the ABA to 'reduce' the power in this region is a wrong decision and has been made without taking all of this information into consideration.

Overspill

While the sensitivity surrounding overspill into adjacent markets is widely understood, overspill in itself is not the issue. The matter is, whether the overspill is excessive. The Oxford Dictionary defines ‘excessive’ as:

‘exceeding of the proper amount or degree in excess’.

The primary factor to consider when planning services is the proper and adequate signal coverage within the approved license area.

The ABA has already established what specifications are required to provide a proper and adequate level of coverage for the 2ONE FM service over a long period of time. The specification required to cover the 2ONE licence area is 5kw. It is well known that whilst this level of power is required to adequately service the licence area, 2ONE does have overspill into the greater Sydney area.

Any overspill by 2ICE outside its licence area would by power alone be dwarfed by the overspill currently being achieved by the 2ONE service.

Even at the original proposed specification of 2kw to the west and 200 watts to the east, the power differential (not accounting for adjacent channel interference, tower and array inference from 2ONE and Fresnel zone issues) would mean that the 2ICE signal would be some 14 dB down on the 2ONE service.
In our discussions with the ABA, the ABA has admitted that 6 dB down is considered significant.

Media Corporation has provided expert technical opinion to the ABA on a range of matters which it would seem has not been considered properly. In particular, Media Corporation has presented submissions from experienced radio engineers that state that the increase in height from 30 metres to 60 metres will have no ‘material’ impact on overspill into the Sydney region.

It appears that the ABA’s technical planning of the 2ICE service has centred more around any potential overspill to the east rather than providing adequate coverage to the ‘entire’ 2ICE licence area.

The engineering report commissioned by the ABA makes a series of ‘assumptions’ and ‘recommendations’. Following is a section from that report:

“Additionally the revised BPB specification of 2kW ERP at Wentworth Falls will allow 2ICE to provide a similar grade of service into the Katoomba centre as that of the 5kW omnidirectional 2ONE service. Both services are transmitted from the same tower at similar transmit antenna height. The 2ONE service is licenced to a maximum antenna height of 70m.”

These comments from the engineering report confirm the following:

1) That an ERP of 2kW at Wentworth Falls will allow 2ICE to provide a similar grade of service into the Katoomba centre as that of the 5kW omnidirectional 2ONE service. Both services are transmitted from the tower at similar transmit antenna height.

In the Engineering Report compiled by the ABA, Figures 2 and 3 show the coverage of the service area to the east of the Wentworth Falls transmitter site.

Figure 2 is for a specification of 200W ERP with an antenna height of 30 metres. This was the previously agreed original Technical Operating Conditions. Figure 2 shows an appropriate coverage in the western sector of the approved licence area, however the areas east of Wentworth Falls do not have an appropriate level of signal. Most of this licence area to the east of Wentworth Falls has a significant population base, however the signal strength is quite deficient in that it will not deliver a useable signal to the large percentage of the population that live in the valleys below the ridge line.

Figure 3 however is the proposed new specification that has been suggested by Media Corporation. This revised specification provides for the previously agreed 2kW (DA) at an increase in height from 30 metres
to 60 metres. Figure 3 clearly shows that a power of 2kW (DA) from the new broadcast location at Wentworth Falls provides an appropriate serviced that covers ALL of the service area including those areas below the ridge line.

Even the Engineering Report from the ACMA agrees with our assessment. In section 5, it states:

“Comparison of the figures also reveals that a 2kW ERP specification is likely to improve coverage within the Lithgow RA3 licence area”.

Both Figures 2&3 show the level of overspill into the Sydney RA1 licence area. The difference between the levels of overspill in figures 2 & 3 are not great however the difference in the coverage of the 2ICE licence area is significant.

It is incumbent on the ABA when planning a service that they provide adequate coverage of the entire service area, not just parts of the service area.

The Engineering Report conducted by the ACMA shows conclusively that without a 2kw (DA) that the eastern portion of the RA3 licence area will not receive an ‘adequate’ signal.

We argue strongly that the ACMA must provide the level of coverage as nominated in Figure 3 irrespective of the small additional level of overspill that may inadvertently occur in Sydney. The overspill depicted in Figures 2&3 is overstated because it does not take full account of other relevant issues.

Modelling of Overspill

During discussions with ABA engineers, it was revealed that no modelling had been undertaken at the revised power levels that had been proposed. Furthermore, the models in the draft engineering report predicting overspill did not take into account the effect of a low power back of antenna signal and the well known signal degradation caused by:

1. the tower being behind the antennas
2. the effect of the 2ONE four bay antenna array being behind the antennas in the direction of Sydney.

Not withstanding the above, the planning for new services should not be done on the basis of concern solely with overspill. The primary concern must be providing an adequate service to the potential listeners inside the licence area. Figures 2 and 3 show conclusively that
if a 2kW (DA) is not in place, the eastern sector of the RA3 licence area will not be adequately serviced.

The power needed to properly and adequately serve the area has been previously clearly established by the 2ONE specifications.

One of two statements must therefore be true:

1. 2ONE is operating at power levels required to adequately serve its licence area – the west included.
2. 2ONE is operating at power levels in excess of what is required to adequately service its license area.

If statement one is true – and we submit it is – then there is no reason why 2ICE should not have specifications more or less equal to 2ONE.

**Insufficient Power**

Modelling undertaken by the licensee using the specifications proposed by the ABA in the draft clearly shows that on a 50/50 basis populated areas to west of the 2ICE licence area will not be adequately served. When the 1kw model is compared with the 2ONE model the deficiencies in the model proposed by the ACMA are clear and unsatisfactory. Adopting this specification will result in the 2ICE service being substandard to the 2ONE service and result in people within the community of interest being unable to reliably receive the 2ICE service in the Blue Mountains.

It is widely recognised that listeners expect better than the 50/50 model used by the ABA in the planning of new services. This is particularly true for the Blue Mountains where a strong reliable signal is required due to the terrain and the life threatening bush fires that come through this area every few years. Radio is an essential service and the quality if this service should not be compromised. There is no greater location in Australia where radio could be considered an essential service than the Blue Mountains region due to the bush fire hazard.

It is no use saying that 50% of the population will receive an ‘adequate’ signal in a situations like this. Lives are potentially at risk here and it is incumbent upon the ABA to ‘ensure’ that ALL residents of the Blue Mountains receive a very strong and reliable signal from their local radio station.

Phillip Barnes who was a past chief engineer at 2ONE has submitted to the licensee that in his experience in the Blue Mountains:

“1kw from Wentworth Falls would definitely not give full coverage of the Blue Mountains region to the west of Wentworth Falls”. At least 2kw is required”.
Alex Kennedy from RTE concurs and adds;

“without at least 2kw in the westerly direction with a slow roll off to the north and south the transmission will fail to deliver a consistently listenable signal in homes and will be patchy on car receivers in the western areas”.

The ACMA must not continue to ignore the evidence of experienced radio engineers who have operated in the Mountains for decades. 2ONE does not suffer from signal problems in the west and there is no justification for imposing licence conditions that would relegate MCAL to offer a substandard service to listeners. Both the people of the Blue Mountains and 2ICE/2LT have a right to the same quality of service granted to 2ONE.

**Grant Conditions That Can Be Met**

It is widely accepted by the world wide engineering community that a ten to one front to back ratio is world’s best practice when designing antenna arrays.

Whatever specification given to licensees must be able to be met and not be so tight as to create a situation where licensee breaches the technical licence conditions.

As an example of this ACMA has proposed a 14 to 1 front to back for the 2ICE service. While parts of the array may be able to meet this, spikes and nulls are created. When looking at this model the practical effect of the tight east specification has a dramatically negative effect on the ability of the serve the licence area in the west.

Put simply, anything more than a ten to one front to back ratio will inhibit the licensees ability to serve its own area. 14 to 1 front to back cannot be uniformly achieved and ACMA is urged to adopt standard engineering practice and grant ten to one.

**2LT AM Translator**

We note the comments made by ACMA in their Draft Report.

Media Corporation has been attempting to reach a resolution on this issue now for over four years and it surely must be incumbent upon the ACMA to advance practical solutions to the problem at hand as a matter of real urgency.
Conclusion

For the past 4 years, the residents of the Blue Mountains have been promised two new radio services.

Despite best efforts, Media Corporation has yet been unable to get these two new radio stations to air. This is despite the fact that the 95.3 MHz frequency that Media Corporation gave up is already broadcasting in Sydney.

Significant financial hardship has resulted from the length of time taken to deal with the matters surrounding these new Blue Mountains services.

While there is no reasonable case for a reduction in power over what has been sought by MCAL there is clearly a case for an increase in power in light of the power granted by the ABA to 2ONE to provide adequate coverage to a service area with an identical western boundary. Therefore, it could be said that the conditions requested by MCAL are indeed ‘modest’.

MCAL now calls on ACMA to move without further delay to;

i) Grant 2ICE the appropriate technical conditions from the Wentworth Falls site that it has sought.

ii) Immediately allocate one of the nominated FM frequencies for the 2LT service from Wentworth Falls on the same basis.

iii) Immediately equalise the licence areas of 2ICE and 2LT to give 2ICE the same licence area and ability to serve the entire Blue Mountains as the 2LT service. Failure to do so potentially places lives at risk.

We thank you for the opportunity of presenting this submission and we look forward to a speedy resolution.