

**Submission
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INQUIRY INTO 2008 LOCAL GOVERNMENT ELECTIONS

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**The Conduct of the 2008 New South Wales Local
Government Elections**

**Submission to the Joint Standing Committee on Electoral
Matters
Parliament of New South Wales**

By

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Preliminary Remarks

In this submission I am addressing two matters of concern in the conduct of the 2008 NSW Local Government elections. These are:

- The effective requirement for local government parties to be registered twelve months before the holding of local government elections.
- The use of random sampling in determining the distribution of preferences from the surplus to quota votes of elected candidates.

The Twelve Month Waiting Period for Party Registration

The Local Government Act replicates many of the procedures used to register political parties for State elections. Amongst these is a provision that a party does not become entitled to the advantages of being a registered political party until twelve months after it has been registered.

This means any candidates who wish to register a party for the purposes of contesting local government elections must do so at least twelve months before the election.

Among other advantages, a party gains the right to be clearly identified 'above the line' on the ballot paper at elections conducted by proportional representation. The name of the registered party appears near the party's group voting square.

I have previously written that I believe this provision to be unfair in relation to State elections. I think it is even more unfair for local government elections and advantages state registered parties who automatically gain the right to be registered for local government purposes.

To avoid being forced to nominate in the ungrouped column of the ballot paper, individual councillors are forced to run a group so they appear with their own column on the ballot paper. However, having grouped, such a councillor is still disadvantaged compared to a registered party by the denial of a group name at the top of the column.

All registered parties receive the advantage of their name appearing in the 'above the line' area of the ballot paper, but any local councillor running at the head of a ticket cannot have their name appear above the line unless they register a party twelve months in advance.

I believe that Independents grouped together on the ballot paper should be permitted to have some form of name appear next to the group voting square on the ballot paper. As it stands, voters looking for local Independent "John Smith" on the ballot paper will only see his name below the line on the ballot paper.

As an alternative to a party name, groups of Independents should be permitted to have their group named after their lead candidate. So if the lead candidate on a group is "John Smith", his group should be permitted to have "John Smith Group" appear next to the group voting square.

The purpose of party names on ballot papers is to assist voters by providing additional information on the affiliation of candidates. To have squares with no affiliation above the line can only encourage voters looking for a particular name to cast an informal '1' only vote below the line.

At Tasmanian House of Assembly elections, nomination rules have been changed in recent years to deal with Independents nominating as groups. All parties registered under the Tasmanian electoral Act require 100 members and they gain automatic right to nominate candidates centrally and have their own column on the ballot paper.

All Independents need 10 nominators to appear on the ballot paper. To have their own group, Independents must put forward 100 nominators, the same number as required for a registered party.

It is possible that some higher threshold could be applied to allow groups to have access to a group name on the ballot paper.

Random Sampling for Surplus Preferences

The provisions in Schedule 5 of the Local Government Regulations duplicate counting procedures used for the NSW Legislative Council. This includes the use of random sampling in determining the flow of preferences for all candidates who achieve a full quota of votes.

The NSW Legislative Council rules were introduced in the 1970s and copied procedures then in place for Senate elections. Unfortunately, the Legislative Council rules were entrenched in the constitution and can now only be changed by referendum.

However, while changing the Legislative Council electoral system requires a referendum, changing the electoral system for local government requires only a change to Schedule 5 of the Local Government Regulations.

While New South Wales has continued to use random sampling, it was abandoned for Senate elections in 1984. No other state uses random sampling in its upper house election procedures. Nor is random sampling used in the Hare-Clark electoral system used in Tasmania and the ACT.

Other states that use proportional representation for local government also use a system where every vote is counted. New South Wales is the only jurisdiction in Australia that continues to use random sampling as part of the process of counting votes.

The main consequences of random sampling are:

- You cannot count the votes twice and guarantee to produce the same results.
- Since the introduction of the current group voting system in 2003, ballot papers have had to be entered into a computer system to ensure that random sampling is done correctly.
- The use of computers has forced centralised data entry, making it very difficult for local elections to be properly scrutineered.
- Instead of the use of computers to produce an accurate and repeatable result, the computers are used to guarantee random sampling, meaning even the computer system cannot conduct the same count twice and guarantee to produce the same result.

In summary, computers have been used to ensure that the procedures of random sampling are undertaken correctly. However, instead of using the computers to produce a more reliable and accurate result, they carry with them the indeterminacy caused by the use of random sampling. By using data entry to ensure correct random sampling, the system has actually diminished the ability of scrutineers to be involved in the counting process.

The alternatives to random sampling are well known and implemented in every other jurisdiction in Australia. Rather than random sampling, every other jurisdiction uses a 'fractional' method, where every ballot paper is counted, and rather than a sample of ballot papers being distributed as full value votes, all ballot papers are distributed but at a fractional value that means the number of 'votes' distributed is a fraction of the 'ballot papers'.

How Random Sampling Works.

Random sampling comes into play whenever a candidate is elected with more than a quota of votes. The following example explains how this works.

Consider an election where Candidate A has 4,000 votes, and the quota for election is 5,000. If Candidate A receives 2,000 votes as preferences from Candidate B, Candidate A now has 6,000 votes, 1,000 above the quota. Of the candidate's 6,000 votes, 1,000 are surplus to quota. The question is, which of the 5,000 votes should be placed aside as Candidate A's quota, and which become the 1,000 votes to be distributed as surplus to quota preferences?

New South Wales uses a 'last bundle' method to determine the surplus. Only the last bundle of votes received putting the candidate over the quota are examined for preferences. In this example, it means only the 2,000 votes that put candidate A over the quota are examined, and of these 1,000 will be surplus. The question is which of the 1,000 votes will be distributed?

The first step is to calculate a Transfer Value. This is calculated by dividing the number of surplus votes by the number of votes received in the last 'bundle'. In the case of Candidate A, the Transfer Value is $(1,000 / 2,000)$ or 0.5000.

All of the 2,000 votes most recently received by Candidate A are counted out to the next available preference. If for example 600 of these 2,000 votes had next preference for Candidate C, the Transfer Value is applied to these 600 ballot papers, meaning that 300 will be transferred to candidate C as preferences, and 300 will remain with Candidate A as part of their quota.

To achieve this transfer, the random sampling method will physically take 300 of the 600 ballot papers and transfer them to Candidate C's total. In the case of a computerised count, the computer would choose the 300 ballot papers. The complication is that if the count was done again, then a different selection of 300 ballot papers would be made. By this method, a re-count cannot reproduce the preference distribution produced by the first count.

The problem has become worse since the introduction of the new group voting method in 2003. There are a smaller number of preference sequences in the count, meaning that an incorrectly drawn sample of ballot papers could bias the result. Group voting makes it harder to ensure that a truly random sample of ballot papers has been selected.

It is the problem of drawing a random sample of ballots that has caused the Electoral Commission to move to data entry of ballot papers and computerised random sampling. The difficulty is, the only data entry solution possible at a reasonable cost requires central data entry, resulting in all ballot papers being transported to Sydney for the final stages of the count. It is no longer permitted for the distribution of preferences to be conducted locally for any proportional representation elections where group voting is used.

The other irony is that while computers could be used to produce a more accurate and repeatable counting process, the retention of random sampling as one of the counting procedures prevents this from occurring. It is random sampling that creates the indeterminacy in the count, whether the count is conducted by hand or by computer.

If a different counting method was adopted, computerised data entry could produce an accurate and repeatable count. More importantly, without random sampling procedures, the count could be conducted manually and locally, leaving scrutineers free to observe the local count.

The Fractional Method.

The 'fractional' method does not involve random sampling and is capable of producing a repeatable result. Without random sampling, it also means a count could be conducted locally, though there may still be some advantages in using computers to conduct elections where large numbers of council positions need to be filled. (e.g. 15 Councillors elected at large in Campbelltown.)

I will repeat the previous example using the Fractional method. Again the process begins with calculating a transfer value. The calculation produces the same value, $2,000/1,000 = 0.5000$.

The Fractional method differs in the next step. Our example still has 600 of the 2,000 votes received by Candidate A at the last count having next available preference for Candidate C. Where with Random Sampling the transfer value was applied by distributing a sample of 300 of A's votes to C at full value, under the Fractional method, all 600 votes would be distributed, but at a reduced value of 0.5000. 600 ballot papers are distributed, but this corresponds to only 300 votes, that is 600 ballot papers times the Transfer Value. The Fractional method draws a distinction between the number of ballot papers transferred and the number of votes transferred.

Tasmania has used the Fractional method to elect its lower house of Parliament for many decades, electing five or seven members from electorates of more than 60,000 voters. They have had little difficulty in completing the count. This is despite using a more complex form of ballot papers where the order candidates appear changes from ballot paper to ballot paper.

The only complication with the Fractional method is that the count consists of bundle of ballot papers at different values. In larger election, such as Campbelltown Council where 15 Councillors are elected at large, this may result in many different transfer value bundles being involved in the count.

However, in councils such as Newcastle where three person wards are in use, the complications of multiple transfer values would be minor. Manually conducting a count for a three person ward under fractional transfer value rules would be relatively easily. There would be no need to data enter ballot papers to ensure correct random sample procedure were followed. This would allow the count to be conducted locally, ending the transfer of ballot papers to Sydney for data entry.

Dealing with Exhausted Preferences.

In describing Transfer Value calculations, I passed over how exhausted preferences are dealt with. Under the NSW rules, preferences exhausting at the next distribution are excluded in the Transfer Value formula.

So if 200 of the 2,000 vote bundle received by Candidate A had exhausted at that point, then the Transfer Value would be $(1,000 / (2000-200)) = 0.5555$. Instead of 300 votes being transferred to Candidate C at the next count, 333 would be distributed. Note that no vote is ever allowed to increase above its full value of 1.0000.

The effect of this formula is that exhausted preferences remain with the elected candidate, while more votes with preferences are distributed to candidates remaining in the count.

The only other jurisdiction to deal with exhausted preferences in this way is the ACT. Tasmania does not exclude exhausted preferences in calculating Transfer Value, which means exhausted preferences are more likely to exhaust under the Tasmanian system, where in NSW they are more likely to finish with an elected candidate.

In my judgment, I believe the NSW method of excluding exhausted preferences before calculating Transfer Value is the more appropriate method for use in NSW.

Alternative Bundling Methods

New South Wales uses the 'last bundle' method in determining which votes will be examined to calculate the Transfer Value and to distribute preferences. The same method is also used in Tasmania and the ACT.

An alternative system is that used for the Senate, where all votes held by a candidate at the point when they are elected are examined. In my previous example, this means all 6,000 of Candidate A's ballot papers would be examined. So the Transfer Value would be $(1,000 / 6,000) = 0.1666$. This method allows some of the first 4,000 votes received by Candidate A to be included in the votes distributed as preferences.

It is a matter of opinion whether the 'last bundle' or the Senate method is a fairer method of doing the calculations. However, it is much easier to conduct a count using the last bundle method, and it is considerably easier to conduct a last bundle count by hand.

Tasmanian Local Government Elections.

Tasmania will be conducting local government elections in October 2009. These will use the fractional method of distributing preferences that I have outlined in this submission. All counts are conducted

manually, though with the use of computer system that provides key steps such as calculation of Transfer Values and tallying of votes from ballot papers at different transfer values.

Tasmanian local government elections are conducted by voluntary postal ballot. It may assist the deliberations of the Committee to visit and observe the conduct of the Tasmanian local government election count using the fractional method.

Further Information

I have previously prepared a number of publications for the NSW Parliamentary Library on elections for the NSW Legislative Council. I would draw the Committee's attention to *Background Paper No. 3/03, "Prospects for the 2003 Legislative Council Election"*. In Chapter 3, pp.11-19 I explain some of the subtle differences between the counting systems used for the Legislative Council, for the Senate, and also for Hare-Clark elections in Tasmania.