

The History of Electricity Fires in Victoria.

Part 2

Exhibit 202: Statistics of fires allegedly involving the S.E.C. from 8 January 1959 to 30 March 1977

This reproduction of Exhibit 202 was created January 2011
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Citation: PROV, VA 4393 Board of Inquiry into the Occurrence of Bush and Grass Fires in Victoria,
VPRS 13230/P1 1939 – 1983, Unit 6, Item: “Exhibits : Folder 8, No. 185 - 209”

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Preface

Exhibit 202 consists of seventeen pages, all of which were photographed, processed, and are presented here. The Inquiry transcript reveals that the statistics and text of Exhibit 202 were prepared by Neil Harrison Kirk, S.E.C. assistant chief claims officer. Kirk makes no mention of any claims against the S.E.C. for loss of life¹. Apologies that due to technical limitations, the text of this exhibit is image-only so cannot be “cut & paste” by word processing or spreadsheet programs. Image quality is such that OCR software is very unlikely to yield useful results either. Further discussion is contained in endnotes on pages 20 to 24. (This includes Annexure A)

¹ Sir Esler Barber in his 1977 report, 4.6.04 on page 96 indicates 'disastrous' 1969 fires, many caused by the S.E.C., but of the twenty-three fatalities, seventeen were certainly NOT due to power lines: these were the motorists trapped on the Geelong Road by the Lara fire, which was started by vehicle exhaust igniting roadside grass (<http://www.cfaconnect.net.au/news/looking-back-with-alan-burgess.html>). It remains to be discovered (by this author) whether any of the remaining six fatalities were caused by fire sparked by power lines. Candidate “electricity fires” include Rodborough (70,000acres), Edington (30,000acres), Gnarrwarre (3,000acres), Torquay (625acres), Newmaralla (800acres), Whittlesea (120acres), Truganina (30,000acres), Mt.Cameron (10,000acres), Werribee North (6,000acres), Newstead (500acres), and Yalla-Y-Porra (7,000acres). If and when data comes to hand, it will be published in this series. Anyone with information in this regard please email me: mickgg@suburbia.com.au M.G.



NOTES

Statistics - Fires Allegedly Involving SEC 8/1/59 - 30/3/77

The statistics have been produced from reports received of fires alleged caused electrically or by the SEC.

Not all fires are reported but it may be accepted that all significant fires are reported. In 1969 and 1977 more fires were reported than would otherwise be the case because of specific requests for all reports for certain periods.

The results or consequences of "faults" are purely fortuitous and "faults" which do not cause fires, outages or damage are not reported.

For the period 8/1/59-30/3/77 399 fires were reported. It is understood this would represent only a very small percentage of the total fires from all causes over this period. About half only involved an area of a few square yards. 111 or 29% of them occurred on two days - 8/1/69 and 12/2/77. The balance 288 or 71%, an average of about 15 per year occurred over the roughly 18-year period.

Region Schedule

South Western	130 or 32% - 2 days	(8/1/69 & 12/2/77)	26	and balance	104
North Eastern	83 or 21% - 2 days	" "	<u>9</u>	" "	75
Northern and Midland	50 or 13% - 2 days	" "	17	" "	33
Eastern Metropolitan	44 or 11% - 2 days	" "	20	" "	24
Mid Western	27 or 7% - 2 days	" "	<u>17</u>	" "	10

Other 5 Regions all less than 20 or 5%.

Wimmera and Mallee had none on the two bad days.

Size Schedule

over 10 000 acres 7 out of 9 (2%) occurred on the two bad days

1000 and under 10 000 acres 10 out of 12 (3%) occurred on the two bad days

100 and under 1000 acres 11 out of 37 (9%) occurred on the two bad days

75% of fires were less than 10 acres.

RURAL FIRES
BOARD OF INQUIRY
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Alleged Cause Schedule

Trees

Falling 83 or 21%) 134 - 33%
 Contact 51 or 12%)

8/1/69 & 12/2/77 - 53 or 13% - balance 81 - 20%

out of 111 or 29% on those 2 days.

Probably a further 16 or 4% involving trees are included in other categories, e.g. low voltage clashing - high voltage fuses.

Conductors Clashing

Low Voltage only 58 or 14%) 67 - 16%
 Others 9 or 2%)

8/1/69 & 12/2/77 - 34 or 8% - balance 33 - 8%

out of 111 or 29% on those 2 days.

Fuse Operations

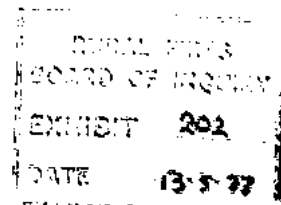
High voltage 37 or 9%) 42 - 11%
 Low voltage 5 or 1%)

8/1/69 & 12/2/77 - 7 or 2% - balance 35 or 9%

On the two bad days 111 fires were reported of which 5 were caused by some outside agency.

Of the remaining 106, 53 involved trees, 34 conductors clashing and 7 fuse operations. The next highest category is miscellaneous and this includes the Strathmore low voltage clashing or clamp-on fuse and Mingay L.A. fires.

Files relating to incidents occurring prior to 1967 have been destroyed.



FIRES REPORTED 8/1/59 - 30/3/77 - ALLEGED CAUSES

Alleged Cause	Total	8/1/59-8/1/69	9/1/69-30/3/77 Excl. 12/2/77	8/1/69	12/2/77
Trees or limbs falling	83	32	14	28	9
Low Voltage clashing	58	12	17	13	16
Conductors contacting trees	51	15	20	11	5
High voltage fuse operation	37	21	11	4	1
Pole fires	32	11	18	2	1
Conductors falling	24	13	9	2	-
Poles falling	15	6	7	-	2
High voltage clashing	9	1	3	5	-
Pole caps falling	9	4	4	1	-
Crossarms breaking	9	5	4	-	-
Lightning arrestors	8	1	7	-	-
Low voltage fuse operation	5	2	1	1	1
Miscellaneous	15	4	7	1	3
Subtotal	355	127	122	68	38
Outside Agency	26	9	12	5	-
Subtotal	381	136	134	73	38
Employees	18	12	6	-	-
TOTAL	399	148	140	73	38

EXHIBIT
 10/29/77
 10/29/77

FIRES REPORTED 8/1/59 - 30/3/77 - SIZE

Size	Total Number	10 years to 8/1/69	9/1/69-30/3/77 Excl. 12/2/77	8/1/69	12/2/77
Over 10 000 acres	9	2	-	3	4
1000 and under 10 000	12	2	-	5	5
100 and under 1000	37	11	15	9	2
10 and under 100	44	17	21	5	1
1 and under 10	102	43	41	10	8
under 1 acre	195	73	63	41	18
TOTAL	399	148	140	73	38

COUNTY OF ...
 ...
 DATE 8-5-77

FIRES REPORTED 8/1/59 - 30/3/77 - REGIONS

Region	Total Number	10 years to 8/1/69	9/1/69-30/3/77 Excl. 12/2/77	8/1/69	12/2/77
South Western	130	53	51	10	16
North Eastern	83	37	37	7	2
Northern and Midland	50	23	10	10	7
Eastern Metropolitan	44	12	12	16	4
Mid Western	27	6	4	10	7
Gippsland	18	3	7	7	1
Barwon	15	4	3	7	1
Wimmera	15	4	11	-	-
Metropolitan	13	2	5	6	-
Mallee	4	4	-	-	-
TOTAL	399	148	140	73	38

FEDERAL BUREAU OF INVESTIGATION
 BOARD OF INQUIRY
 EXHIBIT 101

RURAL FIRES
 COUNTY OF INDIAN
 INCIDENT #22

FIRES REPORTED 8/1/59-30/3/77 : ADJUSTED COUNTS

Year	Total	Trees Falling	L.v. Clashing	Conductor Trees	h.v. Fuse	J.v. Fuse	Pole Fires	Conductors Falling	Poles Falling	h.v. Clashing	Pole Caps	Crossarms Breaking	Lightning Arrestors	Misc	Outside Agency	Emplo
1959	14	4	-	2	1	-	-	1	-	-	-	-	-	1	-	5
1960	5	-	1	-	-	1	-	1	-	-	-	-	-	-	-	-
1961	12	4	1	-	-	-	2	3	-	-	1	-	-	-	1	2
1962	7	1	2	1	-	-	-	-	-	-	-	-	-	-	-	1
1963	4	2	-	-	1	-	-	-	2	-	1	1	1	-	1	-
1964	10	1	1	1	-	-	-	-	1	-	-	1	-	-	4	-
1965	40	10	3	1	10	-	4	6	1	-	-	1	-	2	-	1
1966	20	5	1	1	5	-	1	1	1	-	-	-	-	-	-	1
1967	13	5	1	1	3	-	1	-	-	-	-	-	-	-	2	1
1968	25	2	2	8	1	-	2	1	2	1	-	2	-	1	1	2
1969	99	32	16	14	9	1	4	4	-	7	1	-	2	1	6	-
1970	6	2	-	1	-	-	-	1	1	1	-	-	-	-	-	-
1971	11	2	-	2	-	-	3	-	-	-	-	-	-	-	2	-
1972	11	-	1	4	-	-	2	1	-	-	-	-	1	-	-	1
1973	9	-	1	1	1	-	3	1	1	-	-	-	-	-	-	1
1974	4	-	1	2	-	-	-	1	-	-	-	-	-	-	-	-
1975	16	2	3	3	2	-	1	-	3	-	-	-	-	-	-	1
1976	18	2	2	1	1	-	1	2	1	-	1	1	-	3	2	1
1977	77	11	22	2	3	2	7	1	3	-	2	4	4	5	7	-
399	83	58	58	51	37	5	32	24	15	9	9	9	8	15	26	18

GRASS FIRES ALLEGEDLY CAUSED BY THE COMMISSION
 1959 TO 30 MARCH 1977 INCLUSIVE

PR NUMBER	DATE	LOCALITY	ALLEGED CAUSE	DAMAGE
PR1205	17/1/59	Cobden (SW)	HV contacting pole top	55 acres
PR1206	18/1/59	South Purrumbete (SW)	HV contacting pine trees	100 acres
PR1217	19/1/59	Merricks North (EM)	HV contacting cypress trees	3 acres
PR1218	9/2/59	Kyneton (N&M)	HV fell	Small
PR1226	13/2/59	Bung Bong (N&M)	Limb fell onto HV	50 acres
PR1227	25/2/59	Gapsted (NE)	Faulty liquid filled HV fuse	Small
PR1269	11/5/59	Morwell (G)	Burning off grass	Small
PR1279	25/3/59	Somerville (EM)	Burning off tree loppings	Small
PR1365	1/10/59	Warrandyte (EM)	Burning tree loppings	Small
PR1376	23/10/59	Tyrendarra (SW)	Burning tree loppings	50 acres
PR1393	22/11/59	Lismore (SW)	Limb fell onto HV	Small
PR1421	23/12/59	Wandin North (EM)	Burning tree loppings	1 acre
PR1425	Dec 59	El Dorado (NE)	Tree over HV line	Small
PR1424	1/1/60	Londrigan (NE)	Tree over HV line	Small
PR1441	9/2/60	Woodend (N&M)	Crossarm fire	5 acres
PR1511	30/3/60	Thomastown (EM)	LV clashing	1 acre
PR1729	24/12/60	Branxholme (SW)	HV parted and fell	2 acres
PR1725	21/1/61	Camperdown (SW)	Limb fell over line	Small
PR1743	22/1/61	Trawalla (MW)	Conductor broke at tie	Small
PR1746	28/1/61	Swanpool (SW)	Limb fell over line	Small
PR1784	4/2/61	Pirron Yallock (SW)	Wire across HV	2 acres
PR1744	14/2/61	Dunkeld (SW)	Blasting	5 acres
PR1749	14/2/61	Buffalo River (G)	LV fuse broke down to earth	1 acre
PR1778	18/2/61	Lismore (SW)	Limb fell	40 acres
PR1761	22/2/61	Seymour (NE)	Limb of gum fell	150 acres
PR1762	22/2/61	Buffalo River (G)	LV clashing	3 acres
PR1779	2/3/61	Colac (SW)	HV conductor fell	1 acre
PR2076	31/10/61	Narioka (NE)	Working on service line	10 acres
PR2060	7/1/62	Keilor (ME)	Conductor broke	2 acres
PR2018	16/1/62	Picola (NE)	LV clashing	40 acres
PR2024	26/1/62	Lismore (SW)	Tree over HV	100 acres
PR2045	28/2/62	Bostocks Creek (SW)	LV clashing	1 acre
PR2051	1/3/62	Warrong (SW)	Burning crossarm	5 acres
PR2075	14/3/62	Warrong (SW)	Pole fire	Small
PR2210	4/9/62	Mc Elina (EM)	HV sagged into trees	2 acres
PR2284	1/12/62	Kinypanial (W)	Pole cap fell	103 acres
PR2326	23/1/63	Mokepillay (W)	SDO fuse (no choke)	3 acres
PR2358	4/2/63	Kurra (NE)	Limb fell	187 acres

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NUMBER	DATE	LOCALITY	ALLEGED CAUSE	DAMAGE
PR2640	14/11/63	Port Fairy (SW)	Burning off	Small
PR2604	26/11/63	Heathcote (N&M)	Tree fell	Small
PR2607	17/1/64	Gnarwarre (B)	Pole fell - dry rot	1200 acres
PR2612	28/1/64	Ballarat (MW)	Lighting arrester exploded	Small
PR2652	14/2/64	Gleadowan (NE)	Crossarm broke	Small
PR2682	14/2/64	Bacchus Marsh (MW)	Pole cap fell	8 acres
PR2653	15/2/64	Whorouly (NE)	LV clashing	8 acres
PR2649	22/2/64	Goorambat (NE)	Pole fell - dry rot	6000 acres
PR2675	22/2/64	Kerang (N&M)	Rifle shots brought conductors down	Small
PR2740	15/3/64	Coldstream (EM)	LV fuse overheated and fell	Small
PR2690	23/3/64	Taminick (NE)	HV sagged into tree	Small
-	23/8/64	Mornington (EM)	Cypress tree fell over HV	Small
PR2956	17/1/65	Wangaratta (NE)	Tree limb fell	Small
PR2958	17/1/65	Inglewood (N&M)	Conductor contacted gum tree	10 000 acres
-	17/1/65	Eltham (EM)	LV clashing	3 acres
PR2999	18/1/65	Sea Lake (M)	Crossarm fire	Small
PR2977	24/1/65	Amphitheatre (MW)	Tree fell	4 acres
PR3002	2-3/2/65	Camperdown (SW)	Conductors fell	Small
-	3/2/65	Tallarook (NE)	EDO fuse (no choke)	Small
-	4/2/65	Strath Creek (NE)	EDO fuse (no choke)	Small
PR3006	15/2/65	Yarrawonga (NE)	Pole fell	3 acres
PR3052	24/2/65	Swan Hill (N&M)	Birds brought HV down	Small
PR3045	March 65	Camperdown (SW)	Tree limb fell	Small
PR3046	March 65	Camperdown (SW)	Tree limb fell	Small
PR3047	March 65	Camperdown (SW)	Tree limb fell	Small
PR3048	5/3/65	Vite Vite (SW)	Conductors fell	10 acres
Memo	5/3/65	Mt Evelyn (EM)	LV clashing (tree)	Small
PR3029	6/3/65	Mt Moriac (SW)	Iron blown onto conductors	50 acres
PR3049	10/3/65	Naroghid (SW)	Crossarm broke	Small
PR3050	11/3/65	Goldie-Springfield (N&M)	EDO fuse (no choke)	500 acres
PR3053	12/3/65	Beverford (SW)	Crossarm fire	20 acres
PR3054	23/3/65	Swan Hill (N&M)	Bird into conductors	Small
PR3080	28/3/65	Broadford (N&M)	EDO fuse	1 acre
PR3104	14/4/65	Henty (SW)	Crossarm fire	1 acre
PR3288	14/10/65	Myrthes (NE)	Conductor fell	Small
PR3276	20/10/65	Maryborough (N&M)	Tree cut and fell	Small
PR3450	8/11/65	Reedy Dam (W)	Conductor fell	8 acres
*	10/11/65	Allens' Spur (Birchip Line) (N&M)	EDO fuse (no choke)	Small

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PR NUMBER	DATE	LOCALITY	ALLEGED CAUSE	DAMAGE
PR3327	16/11/65	Narioka (NE)	LV clashing	1 acre
-	18/11/65	Manangatang (N&M)	HV fuses	Small
PR3331	28/11/65	Nurrabil (W)	EDO fuse (faulty tube)	Small
PR3385	22/12/65	Belmont (B)	Pole fire	Small
-	23/12/65	Salt Creek Spur (SW)	Pine limb fell	Small
-	23/12/65	Wallacedale (SW)	EDO fuse (no choke)	Small
-	23/12/65	Warayara Estate Spur (SW)	EDO fuse (no choke)	Small
-	30/12/65	Whorouly East (NE)	Limb fell	Small
-	30/12/65	Darlington Line (SW)	Dead gum tree fell	1 acre
-	30/12/65	Barba Spur (SW)	Tree fell	Small
-	31/12/65	Penshurst Line (SW)	Broken tie	Small
-	1/1/66	Sea Lake (M)	EDO fuse	Small
PR3449	5/1/66	Nagambie (NE)	Tree limb fell	480 acres
-	5/1/66	Baranduda Feeder (NE)	Conductors broke	Small
-	9/1/66	Dunkeld (SW)	EDO fuse	Small
-	11/1/66	Cobden Feeder (SW)	EDO fuse	Small
-	14/1/66	Barwite (NE)	EDO HV fuse	Small
PR3447	14/1/66	Nanneella (NE)	Tree limb fell	Small
PR3399	15/1/66	Yarraberb (N&M)	Pole cap fell	2 acres
PR3440	25/1/66	Nirranda South (SW)	EDO faulty fuse operation	5 acres
PR3439	30/1/66	Waubra (MW)	Faulty neutral connection	Small
PR3427	3/2/66	Wabba (NE)	Blasting	2 acres
-	7/2/66	Oswells Lane Spur (SW)	Faulty LV line connector	Small
PR3466	16/2/66	Trentham (N&M)	Tree limb fell	5 acres
-	20/2/66	Hamilton North Feeder (SW)	LV conductors clashed	Small
-	23/2/66	Craigie Spur (SW)	Crossarm fire	Small
PR3505	12/3/66	Lismore (SW)	Line contacted pine tree	650 acres
-	10/4/66	Yambuk Line (SW)	Conductor broke	4 acres
PR3783	23/11/66	Armytage (SW)	Sugar gum fell	Small
PR3786	30/11/66	Cobram (NE)	Crossarm broke (termites)	Small
PR3799	11/12/66	Guildford (N&M)	Branch of tree fell	Small
PR3809	25/12/66	Elmore (N&M)	Pole fell	19 acres
PR3833	4/1/67	Burramine (NE)	EDO fuse (no choke)	Small
PR3816	6/1/67	Lower Macedon (N&M)	Tree limb fell	Small
PR3914	9/1/67	Colignan (M)	EDO fuse (no choke)	2 acres
PR3863	4/2/67	Penshurst (SW)	Sparrow bridged HV	100 acres

RURAL FIRE
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PR NUMBER	DATE	LOCALITY	ALLEGED CAUSE	DAMAGE
-	5/2/67	Lismore (SW)	Tree fell	Small
-	7/2/67	Pomorneit (SW)	Tree limb fell (pine)	Small
PR3871	7/2/67	Point Lonsdale (B)	Crossarm burnt	10 acres
PR3862	8/2/67	Wannon (SW)	Tree limb fell (red gum)	1 acre
PR3868	23/2/67	Iraak (N)	HV contacted eucalyptus saplings	1 acre
-	12/3/67	Vite Vite (SW)	Two crows caused flashover	Small
PR3973	10/5/67	Coldstream (EM)	Pole charring	5 acres
-	15/11/67	Colbinabbin Line (N&M)	EDO fuse (anti-fire device fitted)	Small
-	25/11/67	Costerfield (N&M)	EDO fuse	Small
PR4198	10/12/67	Birregurra (SW)	LV clashing	270 acres
PR4212	24/12/67	Straun (SW)	Pole cap fell	30 acres
-	13/1/68	Kialla (NE)	HV conductors sagged into a peppercorn tree	1 acre
-	16/1/68	Yeo (SW)	Pole top fire	Small
PR4257	17/1/68	Camperdown (SW)	Crossarm fire	Small
PR4401	23/1/68	Stewarton (NE)	White ants crossarm	3 acres
PR4259	24/1/68	Hotspur (SW)	Transformer failed	16 acres
PR4255	31/1/68	Craig (N&M)	HV contacted trees	5 acres
PR4318	31/1/68	Kialla (NE)	HV sagged into peppercorn tree	Small
PR4253	1/2/68	Elphinstone (N&M)	HV contacted eucalyptus sapling	1 acre
PR4265	1/2/68	Bulla (ME)	Vehicle back-firing	12 acres
PR4264	1/2/68	Rutherglen (NE)	HV contacted foliage	10 acres
PR4275	1/2/68	Norang (NE)	HV conductors sagged and touched gum suckers	300 acres
PR4277	1/2/68	Myrtleford (NE)	Sagging conductor touched gum tree	50 000 acres
PR4279	5/2/68	Camperdown (SW)	HV clashing	Small
PR4309	5/2/68	Somerton (ME)	Workmen caused fire	3 acres
PR4323	12/2/68	Gapsted (NE)	LV clashing	Small
PR4297	13/2/68	Molesworth (NE)	Pole fell (white ants)	4 acres
PR4284	14/2/68	Thomastown (EM)	Bird hit conductors	2 acres
PR4310	17/2/68	Simpson (SW)	LV clashing	Small
PR4321	19/2/68	Kyabram (NE)	EDO arcing at top contact	1 acre
-	26/2/68	Rutherglen (NE)	Tree falling	Small
PR4348	7/3/68	Mt Moriac (SW)	Pine trees over HV	Small
PR4711	20/11/68	Lara (B)	Service broke	Small
PR4783	9/12/68	Wunghnu (NE)	Pole fell (dry rot)	20 acres
PR4782	12/12/68	Maryborough (N&M)	Line contacted gum suckers	8 acres
PR4734	13/12/68	Springhurst (NE)	Crossarm broke at kingbolt	30 acres
PR4759	8/1/69	Rodborough (N&M)	Tie broke - conductor fell	70 000 acres
PR4758	8/1/69	Bedington (N&M)	Conductor sagged into gum	30 000 acres

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PR NUMBER	DATE	LOCALITY	ALLEGED CAUSE	DAMAGE
PR4753	8/1/69	Truganina (ME)	Galvanised iron blown into LV	25 000 acres
PR4743A	"	North Werribee (ME)	Conductor contacted gum tree	6000 acres
PR4745	"	Tatooon (ME)	Conductor contacted pine tree	7000 acres
PR4792	"	Gnarwarre (B)	" " " "	3000 acres
PR4793	"	Ceres (B)	" " " "	3000 acres
PR4769	"	Deer Park (ME)	HV and LV clashed	1100 acres
PR4753B	"	Werribee West (ME)	Conductor contacted pine tree	350 acres
PR4791	"	Drysdale (B)	" " " "	780 acres
PR4789	"	Torquay (B)	" " " "	625 acres
PR4785	"	Eden Park (EM)	" " " "	120 acres
-	"	Newstead (N&M)	LV clashing (private)	500 acres
PR4776	"	Warrandyte (EM)	" " "	250 acres
-	"	Cheviot (NE)	Gum tree falling	200 acres
-	"	Orbost (G)	" " "	800 acres
PR4790	"	Paraparap (B)	" " "	200 acres
PR4777	"	Diamond Creek (EM)	Conductor sagged into gum tree	60 acres
-	"	Learmonth (MW)	Limb falling	10 acres
PR4779	"	Mooralla (SW)	Pole cap fell	80 acres
PR4779	"	Birregurra (SW)	Ball socket out of clevis	50 acres
PR4779	"	Woorndoo (SW)	Sugar gum falling	10 acres
PR4841	"	Woodmans Hill (MW)	Gum limb falling	7 acres
PR4833	"	Norlane (B)	Powder filled HV fuse exploded	5 acres
-	"	Gorae West (SW)	Limb falling	2 acres
PR4779	"	Woorndoo (SW)	Tree falling	1 acre
PR4785	"	Mont Park (EM)	Poplar tree falling	2 acres
-	"	Learmonth (MW)	Limb falling	3 acres
-	"	Newstead (N&M)	LV clashing	1 acre
-	"	Wangaratta (NE)	" "	2 acres
-	"	Chiltern (NE)	" "	2 acres
-	"	Wendouree (MW)	22 kV and 66 kV clashing	3 acres
PR4769	"	Sunshine (ME)	LV fuse box blew up	Small
PR4776	"	Warrandyte (EM)	LV clashing	"
PR4785	"	Eltham (EM)	" "	"
-	"	Cockatoo (EM)	" "	"
-	"	Melton (MW)	" "	"
-	"	Melton (MW)	" "	"
-	"	Daylesford (MW)	" "	"
"	"	Kynbrum (NE)	" "	"

PR NUMBER	DATE	LOCALITY	ALLEGED CAUSE	DAMAGE
-	8/1/69	North Beaufort (MW)	Limb falling	Small
-	"	Ullina (MW)	" "	"
-	"	Broadford (NE)	" "	"
-	"	Woodstock (N&M)	" "	"
-	"	Mt Erica (G)	" "	"
-	"	Coonoor Bridge (N&M)	" "	"
-	"	Tatong (NE)	Tree falling	"
-	"	Belgrave (EM)	" "	"
-	"	Mt Evelyn (EM)	" "	"
-	"	Boronia (EM)	" "	"
-	"	Yarragon (G)	" "	"
-	"	Lang Lang (G)	" "	"
-	"	Ballarat (MW)	Limb falling	"
-	"	Barwon Downs (SW)	Tree falling	"
-	"	Winslow (SW)	Limb falling	"
-	"	Kangaroo Ground (EM)	" "	"
PR4776	"	Warrandyte (EM)	" "	"
PR4778	"	Cottles Bridge (EM)	" "	"
PR4785	"	Strathewen (EM)	Bird caused substation flashover	"
PR4833	"	Norlane (B)	Galvanised iron blown into LV	"
-	"	Ranceby (G)	Pole fire	"
-	"	Inverlock (G)	" "	"
-	"	Kooweerup (G)	Galvanised iron onto HV	"
-	"	Elphinstone (N&M)	Rifle fire - HV insulator	"
-	"	Wangaratta (NE)	Service clashing	"
-	"	Doveton (EM)	22 kV clashing	"
-	"	Hastings (EM)	Different size HV	"
PR4779	"	Irrewarra (SW)	HV LV clashing	"
PR4779	"	Eurack (SW)	Conductor contacted tree	"
PR4779	"	Gherang (SW)	Conductor broke at tie	"
-	"	Broadford (N&M)	Transformer fuse fault	"
-	"	Inglewood (N&M)	EDO fuse did not clear	"
-	"	Cohuna (N&M)	EDO fuse (no choke)	"
PR4779	11/1/69	Willaura (MW)	Broken conductor at tie	"
PR4781	12/1/69	South Wangaratta (NE)	EDO fuse (no choke)	"
PR4779	16/1/69	Winchelsea (SW)	LV clashing	"
PR4794	17/1/69	Grovedale (B)	LV conductors clashed	250 acres
PR4779	17/1/69	Camperdown	Crossarm fire	Small

PR NUMBER	DATE	LOCALITY	ALLEGED CAUSE	DAMAGE
PR4779	17/1/69	Cororooke (SW)	HV and LV clashing	Small
PR4779	17/1/69	Winchelsea (SW)	Crossarm fire	Small
PR4779	17/1/69	Macarthur (SW)	Limb fell	Small
PR4785	17/1/69	Eltham (EM)	HV contacted tree	Small
PR4808	17/1/69	Greenhills (W&M)	HV contacted lightwood tree	15 acres
PR4849	17/1/69	Pomborneit (SW)	Conductors clashed 22 kV - 66 kV	5 acres
PR4809	20/1/69	Pomborneit (SW)	Lightning arrester exploded	Small
PR4779	21/1/69	Dunkeld (SW)	EDO fuse failed to clear	Small
PR4779	22/1/69	Anglesea (B)	EDO fuse failed to clear	Small
PR4779	23/1/69	Streatham (SW)	Lightning arrester exploded	Small
PR4818	30/1/69	Inglewood (N&M)	EDO fuse with choke	2 acres
PR4873	20/2/69	Bradvale (SW)	Tree fell	12 acres
PR4877	26/2/69	Pawbymbyr (W)	Cigarette dropped by work party	9 acres
PR4924	29/3/69	Lismore (SW)	EDO fuse failed to clear	Small
PR5330	26/11/69	Cobram (NE)	Tree fell	2 acres
PR5267	27/11/69	Horsham (W)	Burning off	10 acres
PR5295	28/11/69	North Cundare (SW)	Baling wire dropped on s.w.e.r.	Small
PR5307	11/12/69	Laanecoorie (N&M)	LV clashing	10 acres
PR5333	22/12/69	Docker (NE)	22 kV insulator broke - line fell	2 acres
PR5334	22/12/69	Wangaratta (NE)	Limb fell	4 acres
PR5319	29/12/69	Yalca (NE)	HV contacted gum tree	700 acres
PR5412	18/2/70	Maroona (SW)	HV contacted gum tree	10 acres
PR5434	18/2/70	Chocolyn (SW)	22 kV pole fell	3 acres
PR5434	18/2/70	Heytesbury (SW)	Tree fell	Small
PR5426	2/3/70	Gringegalgon (SW)	Tree fell	Small
PR5425	11/3/70	Broadmeadows (ME)	66 kV - 22 kV clashing	2 acres
PR5877	5/1/71	Pomborneit (SW)	66 kV off insulator	Small
PR5876	8/1/71	Eppalock (NE)	S.W.E.R. sagged into gum tree	1 acre
PR5921	11/1/71	Oxley (NE)	Possum caused flashover	Small
PR5924	30/1/71	Baringhup (N&M)	Pole fire	30 acres
PR5925	8/2/71	Cressy (SW)	Pole fire	Small
PR5929	8/2/71	Roseville (W)	Birds broke service	15 acres
PR5950	6/2/71	Portland (SW)	Pole fire	1 acre
PR5949	16/2/71	Hamilton (SW)	Limb fell	11 acres
PR5953	16/2/71	Dacker (NE)	Crossarm broke due to termites	Small
PR5974	25/2/71	Condah (SW)	S.W.E.R. contacted tree	Small
PR5978	26/2/71	Henty (SW)	Lead to transformer came adrift	5 acres
PR6002	3/3/71	Cavendish (SW)	Red gum limb fell	Small

RECEIVED
 BOARD OF RESERVES
 1971

PR NUMBER	DATE	LOCALITY	ALLEGED CAUSE	DAMAGE
PR6546	27/1/72	Tarrington (SW)	Fallen HV conductors	Small
PR6495	30/1/72	Benalla (NE)	Copper bridge on aluminium conductor failed	Small
PR6477	1/2/72	Pomorneit (SW)	Conductor contacted limb	3 acres
PR6474	2/2/72	Pomorneit (SW)	Conductor contacted limb	Small
PR6815	6/9/72	Crib Point (EM)	HV contacted stringy bark tree	500 acres
PR6832	15/9/72	Hemsley Park (SW)	Burning off	Small
PR7064	20/12/72	Yeo (SW)	Pole fire	4 acres
PR6940	20/12/72	Lower Plenty (EM)	220 kV sagged into gum	2 acres
PR6939	23/12/72	Gwingamma (SW)	LV clashing	Small
PR6960	3/1/73	Caramut (SW)	Pole fire	1 acre
PR6975	5/1/73	Gembrook (EM)	Lightning arrester exploded	1 acre
PR6953	12/1/73	Laverton (ME)	Pole fire	Small
PR6953	12/1/73	Laverton (ME)	Pole fire	Small
PR6998	20/1/73	Noorat (SW)	Conductors contacted pine tree	2 acres
PR7015	22/1/73	Moorooduc (EM)	Pole fire	20 acres
PR7209	Sept 1973	Pakenham (EM)	Burning off	Small
PR7324	21/12/73	Beulah West (W)	EDO fuse (choke fitted)	600 acres
PR7325	21/12/73	Eurack (SW)	LV clashing	53 acres
PR7325	21/12/73	Eurack (SW)	Pole fell	1 acre
PR7356	27/12/73	Nageela (SW)	Tie broken	2 acres
PR7399	31/1/74	Narrawong (SW)	LV clashing	6 acres
PR7423	21/2/74	Skenes Creek (SW)	22 kV conductors fell	Small
PR7825	2/1/75	Drumanure (NE)	22 kV line contacted eucalypt	150 acres
PR7752	2/1/75	Mundoona (NE)	S.W.E.R. contacted pine tree	3 acres
PR7744	8/1/75	Rosedale (G)	66 kV pole fell	20 acres
PR7804	9/1/75	Katamatite (NE)	Pole fell (termites)	4 acres
PR7825	10/1/75	Drumanure (NE)	Limb being lopped brought LV together	Small
PR7878	17/1/75	South Muckleford (N&M)	Gum tree branch fell	20 acres
PR7768	29/1/75	Mingay (SW)	Limb of sugar gum fell	35 acres
PR7773	6/2/75	Chatwynd (W)	S.W.E.R. line contacted eucalypt	10 acres
PR7808	8/2/75	Lake Rowan (NE)	Clamp on fuse did not clear	30 acres
PR7814	18/2/75	Heywood (SW)	EDO fuse (choke fitted)	4 acres
PR7785	22/2/75	Grantville (G)	LV clashing	7 acres
PR7806	22/2/75	Cavendish (SW)	Pole cap fell	400 acres
PR7814	28/2/75	Noorat (SW)	Pole fire	310 acres
PR8113	4/1/76	Warnath (SW)	S.W.E.R. contacted tree	190 acres
PR8114	4/1/76	Noolaric (SW)	S.W.E.R. contacted tree	10 acres

R. T. O. L. F.
 BOARD OF I.
 EXHIBIT 2
 1975

PR NUMBER	DATE	LOCALITY	ALLEGED CAUSE	DAMAGE
PR8124	4/1/76	Ullina (MW)	LV clashing	12 acres
PR8127	4/1/76	Carisbrook (N&M)	Pole fell	100 acres
PR8175	4/1/76	Montmorency (EM)	LV clashing	Small
PR8115	14/1/76	Camperdown (SW)	Pole fire	3 acres
PR8144	20/1/76	Romsey (N&M)	LV clashing (tree)	4 acres
PR8133	30/1/76	Ballarat South (MW)	Loose bridges shorted	100 acres
PR8138	8/2/76	Macarthur (SW)	S.W.E.R. contacted pine tree	4 acres
PR8176	15/2/76	Wallan (NE)	Transformer fault	7 acres
PR8156	17/2/76	Cambrian Hill (MW)	Vehicle in long grass	400 acres
PR8155	19/2/76	Fenshurst (SW)	22 kV conductor broke and fell	50 acres
PR8223	29/3/76	Campbells Creek (N&M)	Crane hit LV which contacted HV	Small
PR8529	14/12/76	Avenel (NE)	Crossarm broke (white ants)	20 acres
PR8562	14/12/76	Wallaloo East (W)	Pole cap fell	500 acres
PR8537	21/12/76	Vectis East (W)	Harvesting machine contacted overhead conductor	15 acres
	22/12/76	Glenaroura (NE)	Tree over service	Small
PR8559	31/12/76	Arthurs Creek (EM)	EDO fuse	3 acres
PR8679	31/12/76	Lockington (NE)	Substation pole fell	1 acre
	1/1/77	Natimuk (NE)	Tree fell	5 acres
	1/1/77	Chiltern (NE)	Bridge burnt through	Small
	1/1/77	Chiltern (NE)	Conductor broke and fell	Small
	5/1/77	Yackandandah (NE)	LV clashing	Small
	10/1/77	Mickleham (ME)	HV sagged into tree	20 acres
	16/1/77	Chin Chin (NE)	Strain crossarm broke	5 acres
PR8599	21/1/77	Apsley (W)	Birds caused service to burn down	4 acres
	25/1/77	Bannockburn (B)	HV dropper to the transformer bushing had become disconnected	Small
	27/1/77	Tongala (NE)	LV fuse	Small
	29/1/77	Yarck (NE)	LV clashing	1 acre
	29/1/77	Nalinga (NE)	Sugar gum limb fell	200 acres
	1/2/77	Yarck (NE)	LV clashing	2 acres
	1/2/77	Eildon (NE)	LV clashing	Small
PR8584	2/2/77	Markwood (NE)	Crossarm broke (termites)	2 acres
	3/2/77	Avenel (NE)	Pole cap fell	Small
	4/2/77	Millewa (NE)	Explosion of lightning arrester	Small
PR8670	5/2/77	Clarkefield (ME)	Conductors fell	200 acres
	5/2/77	Yarraberb (N&M)	Pole fire	Small
	5/2/77	Serpentine (N&M)	Pole fell	Small
	5/2/77	Boronia (EM)	Clashing (tree)	Small

DATE

FE NUMBER	DATE	LOCALITY	ALLEGED CAUSE	DAMAGE
PR8697	5/2/77	Glenburger (SW)	Pole cap fell	150 acres
	5/2/77	Croydon (EM)	HV contacted tree	Small
PR8600	6/2/77	Tarayoukyan (W)	Service cable damaged by galahs	Small
PR8610	11/2/77	Heywood (SW)	Explosion of lightning arrester	Small
PR8612	11/2/77	Heywood (SW)	Explosion of lightning arrester	2 acres
PR8614	11/2/77	Crossley (SW)	Car hit pole, bringing it down	2 acres
PR8622	11/2/77	Springalbert South (W)	Explosion of lightning arrester	8 acres
	11/2/77	Baranduda (NE)	Front end loader contacted conductors	Small
PR8613	12/2/77	Woodhouse (SW)	Pine limb fell	Small
PR8621	"	Meridgil (SW)	Pine limb fell (private)	Small
PR8615	"	Hawkesdale (SW)	Conductor contacted wattle	"
PR8618	"	Terang (SW)	LV clashing (tree)	"
PR8620	"	Portland (SW)	LV clashing	"
PR8641	"	Carisbrook (N&M)	LV clashing	"
PR8639	"	Mooroopna (NE)	LV clashing	"
PR8628	"	Camperdown (SW)	Pine limb fell	"
PR8648	"	Macedon (N&M)	LV clashing (tree)	"
PR8649	"	Spring Hill (N&M)	S.W.E.R. into pine foliage	"
PR8654	"	Coleraine (SW)	LV clashing (tree)	"
PR8660	"	Mt Evelyn (EM)	LV clashing (tree)	"
PR8659	"	Mt Evelyn (EM)	LV clashing (tree)	"
PR8658	"	Upwey (EM)	Faulty LV fuse	"
PR8662	"	Hamilton (SW)	Switchboard	"
PR8652	"	Ararat (MW)	Gum tree fell over	"
PR8661	"	Wonthaggi (G)	Pole top fire	"
PR8663	"	Keysborough (EM)	LV clashing	"
PR8617	"	Merino (SW)	Conductor contacted elm tree	150 acres
PR8619	"	Mortlake (SW)	Sugar gum limb fell	70 acres
PR8643	"	Avoca (N&M)	Gum limb fell (private)	5 acres
PR8644	"	Newtown (MW)	Pole fell (private)	3 acres
PR8642	"	Carisbrook (N&M)	LV clashing	2 acres
PR8638	"	Taggerty (NE)	LV clashing (private)	2 acres
PR8626	"	The Cove (SW)	S.W.E.R. pole fell	3 acres
PR8640	"	Laanecoorie (N&M)	Gum limb fell	1 acre
PR8609	"	Haddon (MW)	Conductor contacted pine tree	500 acres
PR8645	"	Greenvale (N&M)	LV clashing	5 acres
	"	Breakwater (E)	LV clashing	1 acre
PR8606	"	Wallindus (MW)	EDC fuse (no cap) with chook	150 000 acres

RURAL TRUSS
BOARD OF INQUIRY
EXHIBIT 202
DATE

PR NUMBER	DATE	LOCALITY	ALLEGED CAUSE	DAMAGE
PR8611	12/2/77	Pura Pura (SW)	S.W.E.R. sagged into sugar gum	60 000 acres
PR8605	"	Tatyoon (MW)	Sugar gum limb fell	50 000 acres
PR8616	"	Glenthompson (SW)	LV clashing (private) clamp on fuse	20 000 acres
PR8629	"	Mingay (SW)	Lightning arrester or EDO fuse	8000 acres
PR8607	"	Balliang East (MW)	LV clashing	8000 acres
PR8625	"	Byaduk North (SW)	LV clashing (private) or other cause	4700 acres
PR8606	"	Wanbra (MW)	Pine limb fell	4000 acres
PR8623	"	Beeac (SW)	LV clashing	3000 acres
	13/2/77	Benalla (NE)	Stock transport struck and broke LV service cable	Small
	14/2/77	Wyuna West (NE)	Bird caused flashover	2 acres
	14/2/77	Rosebud (EM)	Pole top fire	Small
	15/2/77	Wilgul (SW)	Line re-energised - service pole down	Small
	17/2/77	Boho South (NE)	HV conductor contacted tree	1 acre
PR8646	17/2/77	Kiata (W)	EDO fuses (chokes fitted)	Small
	18/2/77	Benalla (NE)	Crossarm fire	Small
	20/2/77	Traralgon (G)	LV clashing	Small
	20/2/77	Warragul (G)	LV clashing	Small
	20/2/77	Gippsland Region (G)	EDO fuse (choke fitted)	Small
	23/2/77	Mt Eccles (G)	Pole fire	Small
	23/2/77	Harston (NE)	Stock transport struck LV service cable	Small
	24/2/77	Phillip Island (G)	Pole fire	Small
PR8707	11/3/77	Caramut North (SW)	Crossarm fire	Small
PR8685	23/3/77	Healeville (EM)	Limb fell	Small

202

Notes, analysis, opinion.

The first seven pages of notes and tables in Exhibit 202 are, at first reading, confusing. Particularly the first two pages appear to be talking indiscriminately about percentages of percentages, thus making unambiguous and clear interpretation of the statements very difficult.

I make the following comments which I believe are reasonable, and “fair comment”, though industry insiders may take an opposing view:

“**caused electrically or by the S.E.C.**” indicates S.E.C. staff on occasion accidentally caused fires as a result of burning off tree-loppings, use of machinery and power tools, etc.. It may also mean that the S.E.C. is trying to distance itself from fires caused by railway electric lines, or by the SEC's customers' private electric lines (usually from the property boundary to the house, in country Victoria)

“**Not all fires were reported**” may indicate that fires caused by power lines and other live electrical equipment had a long-standing tendency to be under-reported by the S.E.C. over most of the 18 years and 2 months period for which Sir Esler Barber's inquiry sought their data². This would be consistent with heavy criticism of the S.E.C. by their own solicitors and by the Inquiry's final report, for being “blind” to the evidence that their system was igniting many dangerous fires. Note at the bottom of (PDF) page 4 it states “**Files relating to incidents occurring prior to 1967 have been destroyed.**” which adds weight to the idea that S.E.C. was an institution exhibiting symptoms of denial. It gives the appearance of struggling to come to terms with the fact that its otherwise marvellous and convenient energy delivery system had serious flaws.

The use of the word “**fortuitous**” in paragraph 3 is probably not what was intended. The sense of the paragraph indicates that the chance of a given electrical installation fault causing a fire is highly dependent upon circumstances, fuel condition, and especially weather conditions. “Fortuitous” reasonably indicates that in 1977 the **S.E.C. considered itself very lucky** that it had not caused many more serious fires in the years since bare aluminium conductors were deployed across the Victorian landscape.

S.E.C.'s Data shows Massively Increased Risk under Extreme Weather Conditions:

The S.E.C. report should have unambiguously acknowledged they were aware that it was weather conditions – specifically strong hot winds – interacting with their installations that led to disaster on the two specified days in 1969 and 1977.

Kirk's statistical analysis especially falls over by not spelling out S.E.C.'s awareness of the risk factor that such weather conditions imply: For two days out of 6,624 days to cause 111 out of the 399 electricity fires over that period, means that **the risk in those weather conditions for their assets lighting fires is 1,276 times greater – or a risk percentage increase of 127,600% – compared to the 6,622 non-catastrophic weather days.** These numbers highlight the near-certainty of more disastrous firestorms in the years ahead, if Energy Safe Victoria's Paul Fearon, CFA Chief Officer Ewan Ferguson, and Fire Commissioner Craig Lapsley fail to perform their public duty to prevent preventable firestorms.

The **one-thousand-two-hundred-and-seventy-six times risk factor** would be further amplified and compounded if we factor in the number of hectares burned. The S.E.C. did not have the primary data in their possession, but CFA data shows that fires breaking out on days like 8/1/67 and 12/2/77

² A glaring example is contained in Annexure A: Exhibit 260 at the same inquiry.

are going to be much bigger than fires breaking out on milder days. It is safe to assume a factor of ten, so the risk of powerlines burning any given hectare of land in rural Victoria is probably about **one million percent** greater on catastrophic fire weather days (i.e. 10,000-fold increased risk per hectare). In this context, "Size Schedule" on PDF page 3 is particularly confusing, and if anything tends to obscure the important positive correlation between a fire's size and the likelihood it was caused by power lines. (really big fires are more likely to have been lit by power lines, same is found in Californian studies).

There is a notable absence of any mention of the human toll. It seems very unlikely that no deceased estate of any member of the public had ever made a claim against the S.E.C. for causing a fatality. These statistics were compiled by the claims officer, so any such claims should have been declared in these statistics.

There is undeniably a very strong positive correlation between hectares burned, rate of fire spread, and the **human death toll**, as Black Saturday so tragically demonstrated.

M. G. Gunter
January 2011

Annexure A: Multiple Electricity Fires, 21 December 1973

Exhibit 260 (see image below) relates to fires on 21 December 1973: senior CFA management formally notified Chief Officer A.G. Pitfield that CFA brigades had good evidence of twenty-two fires being caused by S.E.C. lines or equipment. Furthermore "Beeac" fire was actually three separate fire starts according to Exhibit 263, so the total for the day was **at least twenty four S.E.C. fires**, but the S.E.C. data in exhibit 202 – page 16 of this PDF – will admit to only three fires in the whole state: that is **only twelve percent – or one in eight – of the number being alleged by the CFA!!**

26 Cases *17cc(8)*
S.E.C. has been advised

MEMO TO: CHIEF OFFICER

FROM: ASSISTANT CHIEF OFFICER (STAFF)

SUBJECT: FIRES ATTRIBUTED TO OR ASSOCIATED WITH
S.E.C. POWER LINES 21/12/1973

DATE: 14th JANUARY, 1974.

file

For your information - Fire reports received to date re fires which occurred on Friday, 21st December, 1973, indicate that at the following locations fires were attributed either to fallen power lines or tree limbs falling on power lines:-

Swanpool	25	Newbridge	21
Locksley	22	Goorac	17
Banjee	21	Birchip	20
White Gate	23	Cope Cope (2)	20
Brim	17	St. Arnaud	19
Lyndhurst	8	Stawell	26
<u>Motullah</u>	28	Molka	22
Warncoort	6	Euroa	22
Beeac	6	Picola	22
Bayswater	13	South Warrandyte	15
Ballarat	1	Goornong	21

Phoned info to do Barber on 4/1/74

contract per phone call liaison as S.E.C. - advise

6150223. Bill

McPeck. McCannly.

J. R. BARBER.

RURAL FIRES
BOARD OF INQUIRY
EXHIBIT 260

Exhibit 260 is a document dated three years prior to the 1977 fires being investigated, but forms part of the diligent historical analysis undertaken by the thorough 1977 board of inquiry under its Chairman Sir Esler Barber. In fact, thanks to the inquiry calling for statistical data from CFA and S.E.C. going back to 8th February 1969, it virtually became an inquiry into power line fires on that earlier date as well. It would appear that the Bolte government had deemed it unnecessary to investigate the 1969 fires, and any deaths they (may have) caused at that time. In the era of Rupert “Dickie” Hamer, a “small-L liberal”, government was becoming more accountable and open.

Exhibit 260 has been heavily annotated, and according to CFA Chief Officer Howe when examined before the Board, those biro marks demonstrate that there was “good liaison” between CFA senior officers and the S.E.C. to fix or mitigate the power line fire starts risk.³ Others, including counsel assisting, and the Board, seemed to challenge that robustly during Howe's cross-examination. The hurried messy annotations of exhibit 260 show a laxity in CFA's record-keeping standards, and raise serious questions about CFA's attitude to alteration of the historical record, in my opinion.

M. Gunter
North Melbourne
January 2011

3 Inquiry transcript pages 2143 to 2224, see VPRS.9823/P2, Unit 13 Item “Day 43 - 45 Transcript Of Proceedings - Board Of Inquiry”