

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

'84 AGO -8 P12:18

In the Matter of)
PHILADELPHIA ELECTRIC COMPANY)
(Limerick Generating Station,)
Units 1 and 2))

Docket Nos. 50-352
50-353

NRC STAFF'S PROPOSED CORRECTIONS OF
TRANSCRIPT FOR HEARINGS ON LEA'S
DES CONTENTIONS AND CITY CONTENTIONS 13, 14 AND 15

<u>Page</u>	<u>Line</u>	<u>Change(s)</u>
11,095	24	Change "Lemper" to "Rutberg".
11,134	6	Change "often on" to "off and on".
11,137	20	Change "correct" to "corrected".
11,160	6	Change "S-H" to "S-H ₂ O".
	11	Change "S" to "S-H ₂ O".
	13	Change "small." to "small,".
	14	Change "And" to "and".
11,170	1	Change "can" to "come".
	9	Change "area" to "areas".
11,172	13	Change "participate" to "participated".
	17	Change "CRAC 8" to "CRAC-IT".
	18	Change "name" to "names".
11,173	5	Change "size" to "exercise".
	5	Change "procedural" to "procedures".
	8	Change "CRAC 8" to "CRAC-IT".

<u>Page</u>	<u>Line</u>	<u>Change(s)</u>
11,173	12	Change "CRAC 8" to "CRAC-IT".
	17	Change "of" to "and".
	19	Change "what" to "how" and "consequences" to "consequence".
	20	Insert "calculation" at the beginning of the line.
	26	Change "extent" to "accident".
11,174	4	Change "CRAC 8" to CRAC-IT".
	7	Change "that" to "and".
11,175	12	Change "experimental" to "experiential".
11,176	1	Change "experimental" to "experiential".
	7	Change "a difference with" to "in reference to".
	16	Change "bomb test" to "bombs".
11,177	20	Insert "unit site" after "multiple". Delete "3" after "Zion".
	21	Change "Probabilistic Risk Analysis" to "probabilistic risk analyses" and change "has" to "have".
11,178	2	Change "and" to "from".
	4	Insert "and" before "would".
	5	Change "PRAs" to "there", "many" to "mini", and "are" to "or".
	7	Change "of" to "or".
	10	Change "Zion. They" to "Zion -- they".
	25	Change "300" to "400".
11,179	8	Change "cracks" to "breaks", "would" to "into what" and "and" to "at".
11,180	13	Change "completing" to "completeness".

<u>Page</u>	<u>Line</u>	<u>Change(s)</u>
11,181	3	Change "of" to "on".
	4	Change "results" to "result,".
	6	Change "supporting" to "supportive".
	14	Insert "no evacuation" after "had".
11,182	21	Change "but" to "and" and "assessment" to "assessments".
	22	Change "but" to "for".
11,183	8	Change "where" to "with" and "relates" to "release".
11,185	13	Insert "several" before "CRAC".
11,186	13	Change "absence. So" to "Option subgroup,".
11,188	1	Insert "weather" before "sequence".
	5	Insert "weather" before "sequence".
	14	Insert "cancer" before "fatality".
11,189	9	Insert "error" after "any".
	19	Insert "data" after "population".
	21	Insert "societal" before "cancer".
11,190	1	Change "as" to "and".
11,191	5	Change "inputs; the" to "inputs; we".
11,192	17	Change "were" to "for", "initiators," to "initiators".
	18	Delete "they"; change "there. The" to "there, the".
11,194	18	Change "mental" to "metal".
11,196	5	Change "20" to "double".
	9	Change "1 times 10^{-3} " to "5 times 10^{-3} ".

<u>Page</u>	<u>Line</u>	<u>Change(s)</u>
11,196	24	Change "correct" to "inccrrect".
11,197	4	Change "CCDA" to "CCDF".
11,200	10	Insert "not" after "could".
	15	Change "conversant" to "conversion".
	20	Insert "to" after "responded".
11,201	6	Change "FES" to "testimony".
11,202	12	Change "consequences" to "sequences".
11,203	18	Change "with the" to "weighted".
11,204	1	Change "you" to "we" and "in" to "to".
11,206	14	Change "difference" to "different".
11,208	11	Change "for" to "or".
11,209	1	Insert "be" after "to".
11,211	13	Delete "power".
	17	Change "Table 5.11(e)" to "Table 5.11(h)".
11,212	17	Change "Dr. Brannigan" to "Dr. Branagan".
	21	Change "means" to "mean".
11,213	21	Insert "lower" after "be".
11,215	23	Change " 10^{-4} , -5 , 5 times -6 " to " 10^{-4} , 10^{-5} , 5 times 10^{-6} ".
11,216	5	Change "occurred" to "would occur".
	9	Insert "exposure" after "population".
11,248	7	insert "and" after "cases".
	8	Change "cancer. And in" to "cancer in".
11,251	11	Change "uterine" to "in utero".
	17	Change "a period" to "plateau period".

<u>Page</u>	<u>Line</u>	<u>Change(s)</u>
11,251	19	Change "double up" to "develop".
11,252	25	Delete "15".
11,253	1	Delete "percent in" and change "to 15" to "is 58".
11,254	11	Change "in" to "of", "birth" to "births".
11,258	12	Change "2.6 minus 1" to " 2.6×10^{-1} ".
11,259	5	Change "made" to "moved".
11,261	22	Insert "thyroid" after "total".
11,262	17	Change "tables" to "tablets".
11,263	18	Insert "thyroid" before "ablation".
11,268	24	Change "abdominal" to "prodromal".
11,269	1	Insert "rem" after "400".
	2	Change "and by it attaining" to "and, retaining".
11,270	14	Delete "the age groups for".
11,274	9	Insert "same" after "to the" at the end of the line.
	11	Change "talked" to "thought".
	12	Change "of" to "in the FES".
	15	Change "or" to "can be".
11,275	10	Change "Dr. Shearon" to "Dr. Acharya".
11,281	1	Change "estimate are" to "estimator".
11,285	16	Change "assembled" to "sampled".
11,286	23	Change "as" to "and".
11,287	1	Change "in large consequence" to "ten largest consequences".
	4	Change "of 10 is 10 is to the power" to "of 10 is 10 to the power".

<u>Page</u>	<u>Line</u>	<u>Change(s)</u>
11,285	16	Change "assembled" to "sampled".
11,286	23	Change "as" to "and".
11,287	1	Change "in large consequence" to "ten largest consequences".
	4	Change "of 10 is 10 is to the power" to "of 10 is 10 to the power".
	5	Delete "if it is 10".
	8	Change "raise" to "be raised" and "-1.5 is" to "-1.5, which is".
	9	Insert "some of" after "with".
	23	Change "keep" to "explain".
11,288	8	Insert "raised to the power" after "10".
	11	Change "-1" to "or minus 1" in both places where it occurs in the line.
	15	Change "10 ⁻⁵ " to "10 ⁻⁵ ".
	16	Insert "sign" after "alternative".
	17	Change "side" to "sign," and "Then" to "times 10 to the power".
	18	At the end of line 18, insert "(which is $10^{-5} \pm \sqrt{1.5^2 + 1^2 + 1^2}$."
	20	Insert "raised" after "10", delete "the square" and change "-5" to "-.5".
	21	Change "squared" to "raised to" and "square" to "raised to".
	22	Change "square" to "raised to" in both places where it occurs in the line.
11,290	19	Change "accidents" to "accident categories".
11,297	15	Change "that" to "there".
11,301	16	Insert "9 x" before "10 ⁻⁵ ".

<u>Page</u>	<u>Line</u>	<u>Change(s)</u>
11,301	21	Delete "first two" and insert "is" after "value".
	22	Change "risk" to "release" and "that" to "the".
	23	Insert "risk" before "by" at the beginning of the line and change "risk category" to "release categories".
11,302	1	Insert "made" after "which is" and change "risk" to "release".
	2	Change "which" to "with" and insert "release" following "individual" at the end of the line.
11,361	13	Change "rabidium" to "rubidium".
	14	Change "berium" to "barium".
11,362	22	Change "damage and disease" to "damaging release".
11,366	7	Change "with the Applicant" to "by the Applicant".
	14	Change "limited" to "limiting".
11,376	7	Change "35" to "25".
	17	Change "does" to "dose".
11,382	9	Change "3 x 4" to "3 x 10 ⁴ ".
	10	Change "10 x 3" to "10 ³ ".
11,383	12	Change "true" to "magnitude".
	13	Delete "if".
11,384	5	Change "background" to "CRAC output".
	6	Change "CCDF" to "CCDFs"
	7	Change "case" to "page" and "some" to "several".
	8	Change "selected" to "printed".

<u>Page</u>	<u>Line</u>	<u>Change(s)</u>
11,384	9	Insert "one" after "really" at the end of the line.
	22	Change "doing" to "printing out".
11,391	18	Change "concluded" to "included".
11,422	8	Change "Jaques Reed. Jaques" to "Jacques Read. J-a-c-q-u-e-s".
11,424	20	Change "The" to "If the".
11,450	7	Change "has imposed" to "is exposed".
	17	Change "that is also" to "there is also".
	19	Delete "we didn't -- at the".
	20	Delete "site".
11,457	23	Change "back-hand" to "back-end".
11,466	22	Change "when the corresponding" to "corresponding to".
11,468	4	Change 7.52×2^{-9} . That" to 7.52×10^{-9} that"
	5	Change "7 x 10 is for 5,000" to "7 x 10 ⁵ thousand".
11,481	3	Change "compared" to "composed".
11,483	18	Change "Table K.1 for" to "Table K.1. For".
	21	Change "or" to "of a"
	22	Change "consequence for" to "consequence, say".
11,484	6	Change "regions" to "values".
	8	Change "91" to "91 x 15".
	9	Change "91 sums" to "91 x 16 samples" and "divided by 91" to "divide that by 91".
	10	Change "in the early fatality" to "of the early fatality".
	18	Change "the sum" to "them".

<u>Page</u>	<u>Line</u>	<u>Change(s)</u>
11,484	22	Change "latent cancer" to "late reloc".
11,494	15	Change "APS" to "FES".
	16	Change "APS" to "FES".
	17	Change "APS" to "FES".
11,495	23	Change "APS" to "FES".
11,510	14	Change "treating" to "telling", "person" to "persons" and insert "it" after "that".
	15	Change "person" to "persons"; insert "who" after "person(s)" and change "has" to "have".
11,511	11	Change "re-look" to "reloc".
	14	Change "re-look" to "reloc".
11,519	12	Change "The analyses" to "an analyses" and "and the risks" to "in the risks".
11,520	3	Insert "a" following "bound to" and change "small percents" to "extent".
11,521	10	Insert "evading" following "of".
	13	Change "both" to "dose".
	14	Change "passes," to "passes".
	25	Change "agency" to "emergency".
11,522	4	Insert "not to be able" after "appeared" and "so" after "do".
	5	Insert "reduce" after "is" and "from" after "dose".
11,535	5	Change "the percent" to "in proportion".
	7	Change "ben" to "been".
11,545	15	Change "highly" to "high".
	16	Change "contaminated" to "contamination".
11,548	10	Change "of" to "or".

<u>Page</u>	<u>Line</u>	<u>Change(s)</u>
11,548	16	Change "person" to "percent".
11,555	9	Change "dependently" to "dependent".
11,558	9	Change "plus" to "percent".
11,692	17	Change "release" to "releases".
	17	Delete the word "accidents".
11,711	15	Delete "of".
	16	Delete "east".
11,712	11	Change "hard" to "hot".
11,718	1	Delete "not".
	14	Change "8.67" to " 8.67×10^{-5} ".
11,733	24	Change "15" to "50".
11,735	15	Change "rate" to "state".
11,746	19	Change "400 up" to "40 up".
11,758	25	Change "or" to "of".
11,762	14	Change "January 1st" to "January 4th".
11,764	9	Change "the representative" to "was representative".
12,143	12	The second FES Figure, No. 5.4(1) should read 5.4(1)
12,148	1,9,22	Change "presence" to "fractions".
12,149	3	Change "presence" to "fractions".
12,164	15	Change "conservatism" to "concentration".
12,164	17	Change "layers" to "levels".
12,167	6	Change "water" to "reactor".
12,179	6,8	Insert "person-rem" after the exposure figures in both lines.

12,179	9	Change "population rem" to "person rem".
12,179	12	Insert "to this" after "When you add".
12,181	6	Insert "weighted" after "probability".
12,182	24	Change "concentration" to "consequence".
12,240	8	Change "pool" to "food".
12,244	9	Change "similar" to "simulate".
12,245	10	Change "EPS" to "FES".
12,250	4	Change "disbursement" to "dispersion".
12,251	2	Change "risk" to "release".
12,255	23	Change "eight" to "age".
12,270	18	Change "plus" to "of".

Respectfully submitted,

Benjamin H. Vogler
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Ann P. Hodgdon
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Dated In Bethesda, Maryland
this day of August 1984

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

DOCKETED
USNRC

84 AGO -8 P12:18

In the Matter of

PHILADELPHIA ELECTRIC COMPANY

(Limerick Generating Station,
Units 1 and 2)

Docket Nos. 50-352
50-353

OFFICE OF SECRETARY
OF ENERGY

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S REPLY TO LIMERICK ECOLOGY ACTION'S AND THE CITY OF PHILADELPHIA'S PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW RELATING TO SEVERE ACCIDENT RISK ASSESSMENT CONTENTIONS" and "NRC STAFF'S PROPOSED CORRECTIONS OF TRANSCRIPT FOR HEARINGS ON LEA'S DES CONTENTIONS AND CITY CONTENTIONS 13, 14 AND 15" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or as indicated by an asterisk through deposit in the Nuclear Regulatory Commission's internal mail system, or as indicated by a double asterisk by use of express mail service, this 6th day of August 1984:

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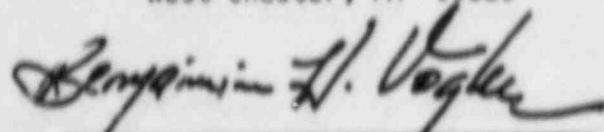
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory Commission
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Atomic Safety and Licensing Appeal
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