

Solid State Energy Conversion Alliance Core Technology Program



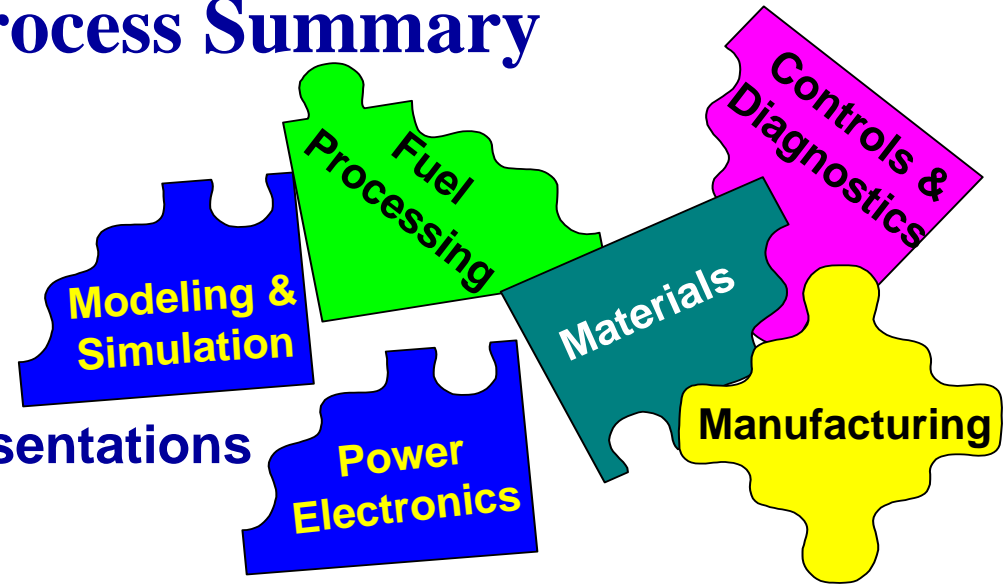
*January 27 - 28, 2005 Workshop
Peer Review Rating Results Summary*

Donald Collins





Review Process Summary



- **Core Technology Project Presentations**
 - Project Objectives & Results
 - Non-proprietary Information
 - Industry, National Lab & University Participation
- **Verbal & Written Constructive Comments**
 - Written Comments on Peer Review Forms
 - Industry Verbal Feedback at Workshop
- **Core Participant Review & Reply to Comments**
 - Reply to Comment Issues
- **DOE NETL Redirect Projects as Needed**





Peer Review Questions

Science & Technology Issues

1. How relevant are the technical issues being addressed in this project?

Objectives & Approach

2.a. If the objectives are fully met, how significant will be the results of this project?

2.b. How effective is the approach in addressing the technical issues of this project?

Results

3.a. How well do the results/progress relate to the project objectives?

3.b. How important are the results of this work in the advancement of the Core Technology area?

Applicability

4. How beneficial are the results of this work in the development efforts of the Industry Teams?





Peer Review Rating Scale & Definitions

 Not at All

 Marginal

 Significant

 Superior

 Outstanding

Not at all – is viewed to be inferior in quality and amount, possibly duplication of existing work

Marginal – provides/likely to provide little useful knowledge or technology advancement

Significant – has/will have an influential impact on the core science and technology

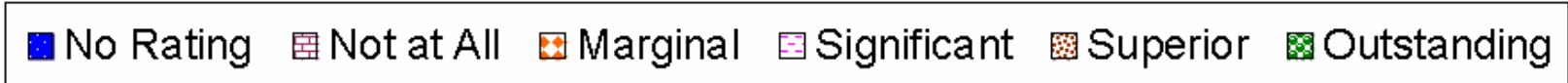
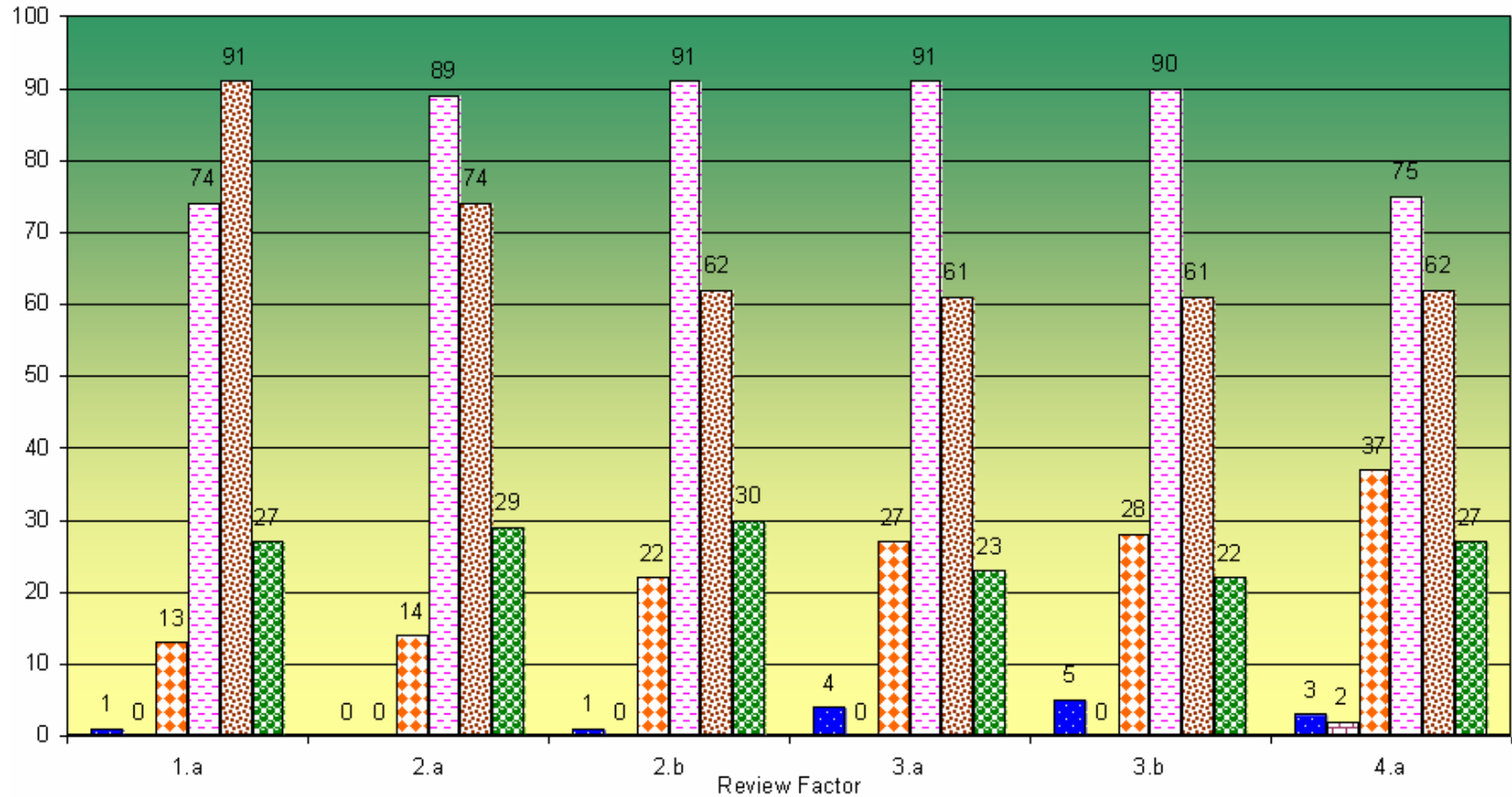
Superior – is considerable in quantity, quality of advancement of core science and technology

Outstanding – marked by eminence and distinction in advancing the state-of-the-art and/or knowledge in the fields of science and engineering



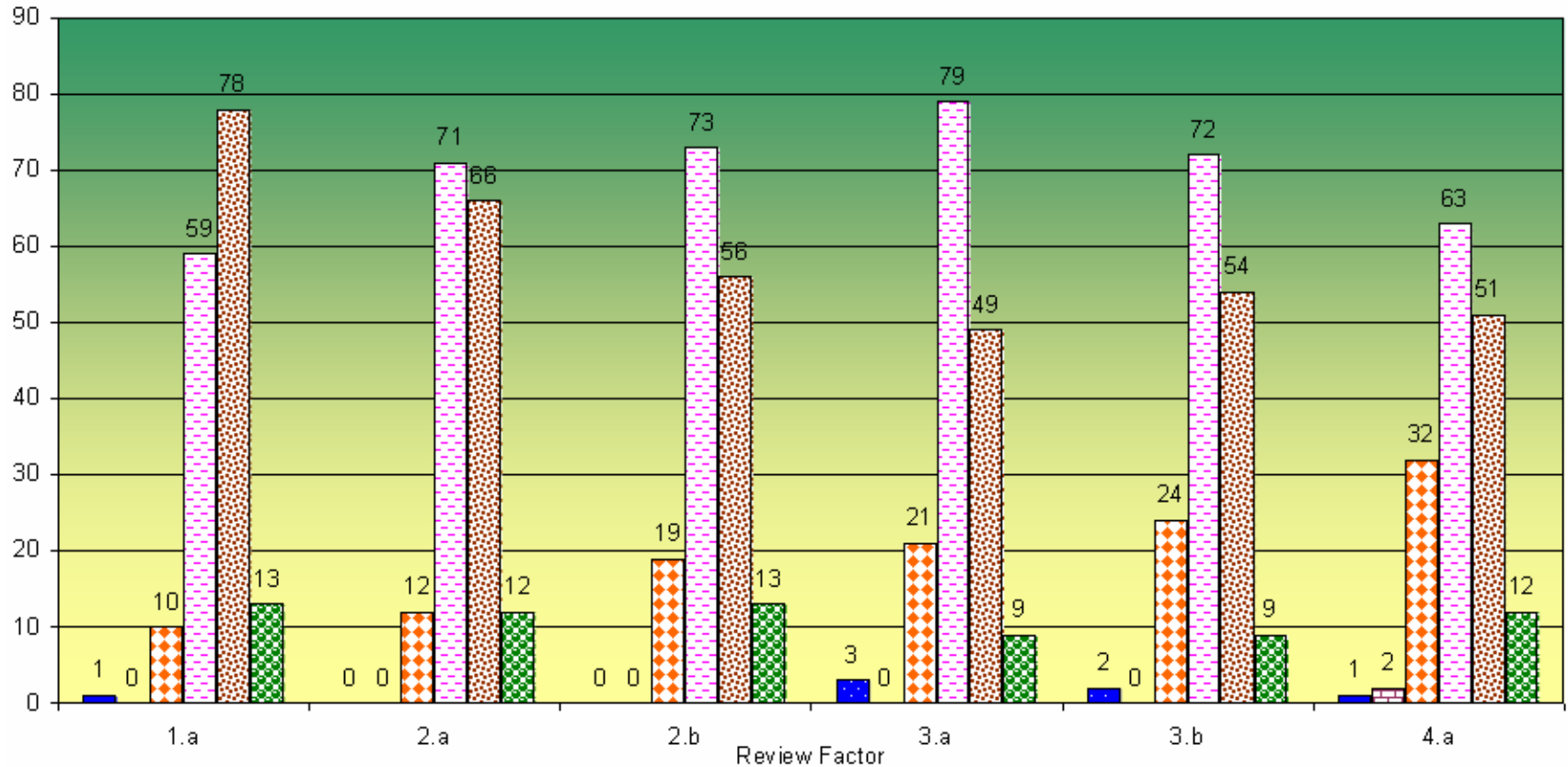


Overall Program Ratings





Overall Program SECA Industry Team Ratings

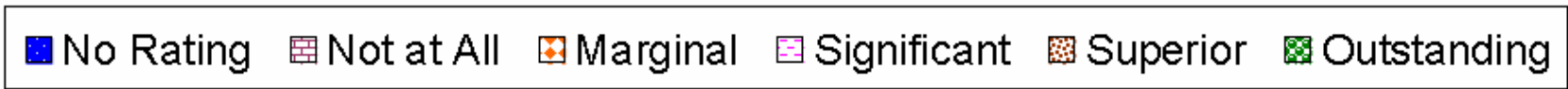
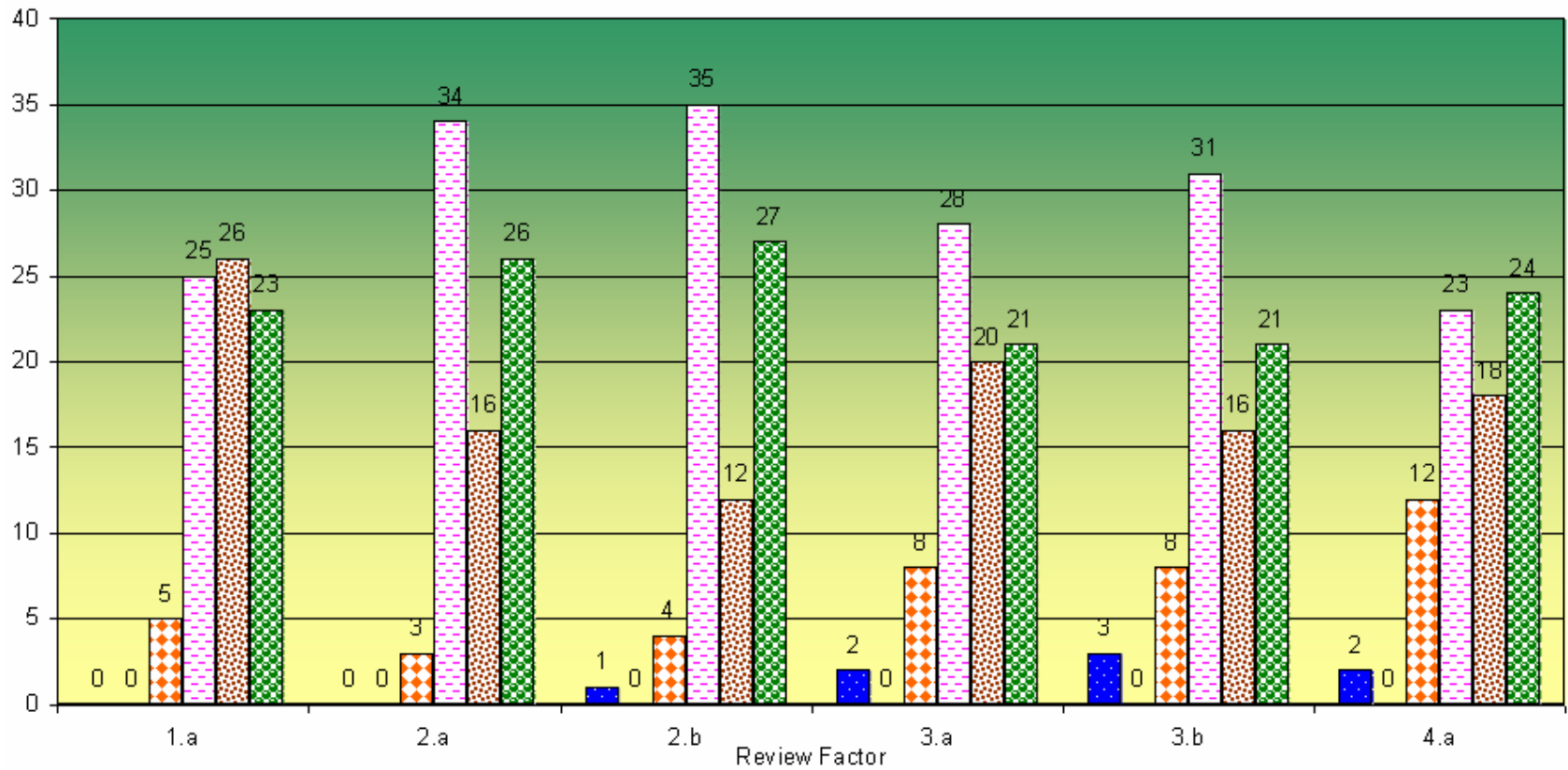


■ No Rating ■ Not at All ■ Marginal ■ Significant ■ Superior ■ Outstanding





Overall Program Non-SECA Industry Team Ratings





Overall Program Rating Data (1 of 2)

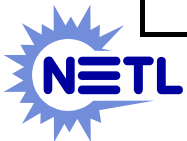
Reviewer Industry Team	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	1	0	10	59	78	13
2.a	0	0	12	71	66	12
2.b	0	0	19	73	56	13
3.a	3	0	21	79	49	9
3.b	2	0	24	72	54	9
4.a	1	2	32	63	51	12
Sub-Total	7	2	118	417	354	68
National Laboratory	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	0	3	3	1
2.a	0	0	0	5	1	1
2.b	0	0	0	5	1	1
3.a	0	0	0	4	2	1
3.b	0	0	0	5	1	1
4.a	0	0	0	2	4	1
Sub-Total	0	0	0	24	12	6
Government (non-DOE)	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	3	13	10	18
2.a	0	0	1	19	5	19
2.b	1	0	2	18	4	19
3.a	2	0	6	13	7	16
3.b	1	0	5	15	6	17
4.a	1	0	9	11	6	17
Sub-Total	5	0	26	89	38	106





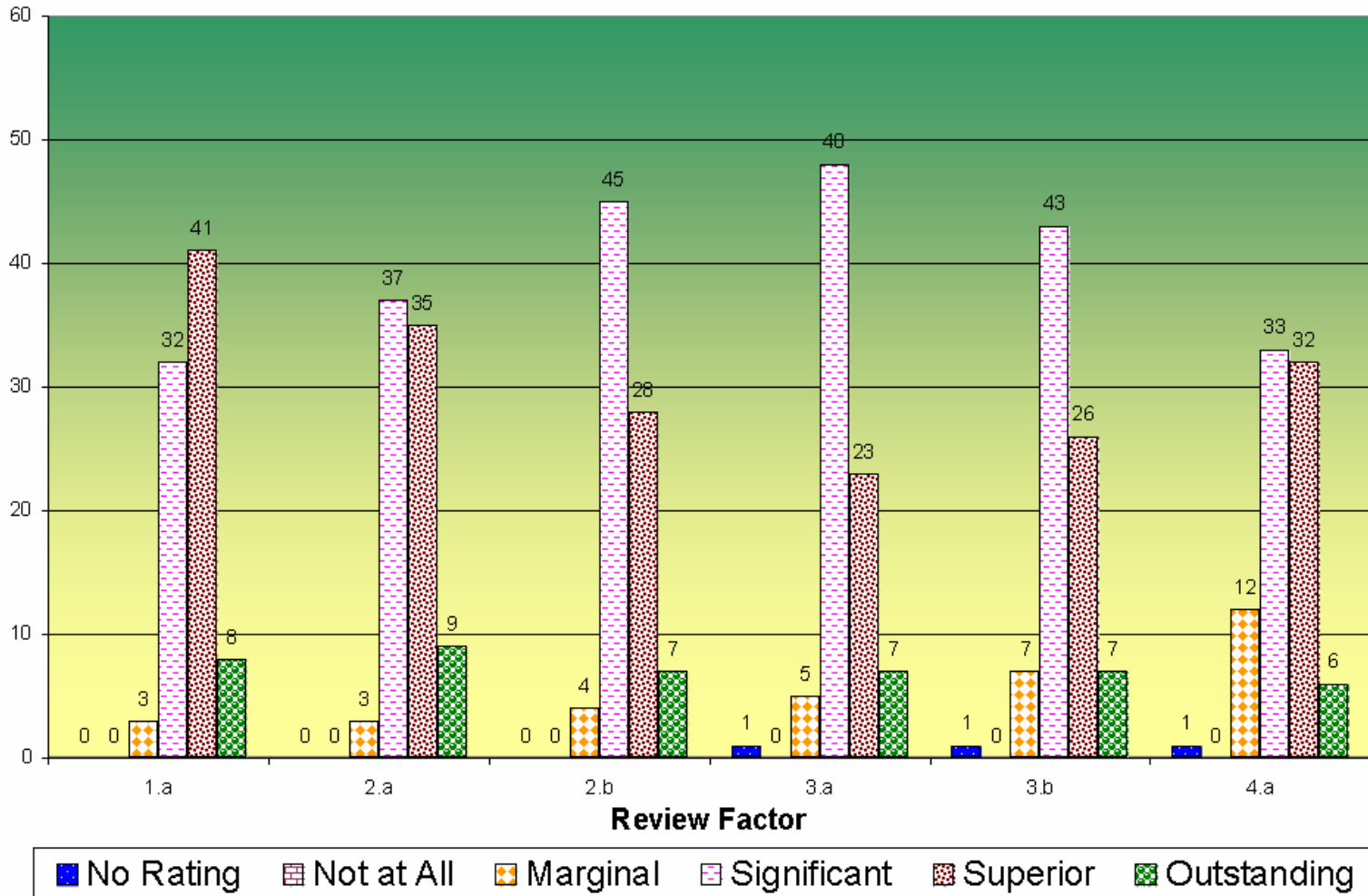
Overall Program Rating Data (2 of 2)

Reviewer	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
Other	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	2	9	13	4
2.a	0	0	2	10	10	6
2.b	0	0	2	12	7	7
3.a	0	0	2	11	11	4
3.b	2	0	3	11	9	3
4.a	1	0	3	10	8	6
Sub-Total	3	0	14	63	58	30
Factor Totals	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	1	0	13	74	91	27
2.a	0	0	14	89	74	29
2.b	1	0	22	91	62	30
3.a	4	0	27	91	61	23
3.b	5	0	28	90	61	22
4.a	3	2	37	75	62	27
Rating Totals	14	2	141	510	411	158
Non-Industry Team Factor Totals	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	5	25	26	23
2.a	0	0	3	34	16	26
2.b	1	0	4	35	12	27
3.a	2	0	8	28	20	21
3.b	3	0	8	31	16	21
4.a	2	0	12	23	18	24
Rating Totals	8	0	40	176	108	142





Materials & Manufacturing





SECA Materials & Manufacturing Rating Data (1 of 2)

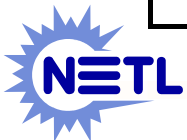
Reviewer Industry Team	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	3	30	38	7
2.a	0	0	3	33	34	8
2.b	0	0	4	41	27	6
3.a	1	0	5	44	22	6
3.b	1	0	7	39	25	6
4.a	1	0	12	31	29	5
Sub-Total	3	0	34	218	175	38
National Laboratory	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	0	2	3	1
2.a	0	0	0	4	1	1
2.b	0	0	0	4	1	1
3.a	0	0	0	4	1	1
3.b	0	0	0	4	1	1
4.a	0	0	0	2	3	1
Sub-Total	0	0	0	20	10	6
Government (non-DOE)	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	1	7	6	8
2.a	0	0	0	12	2	8
2.b	0	0	1	11	2	8
3.a	1	0	2	10	3	6
3.b	0	0	3	7	5	7
4.a	0	0	6	6	3	7
Sub-Total	1	0	13	53	21	44





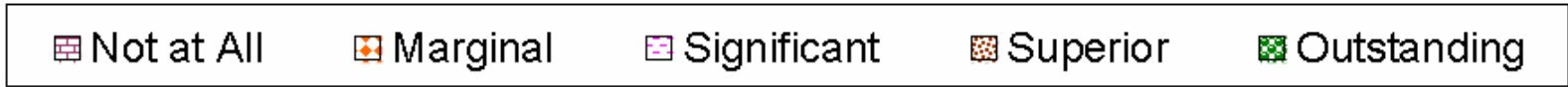
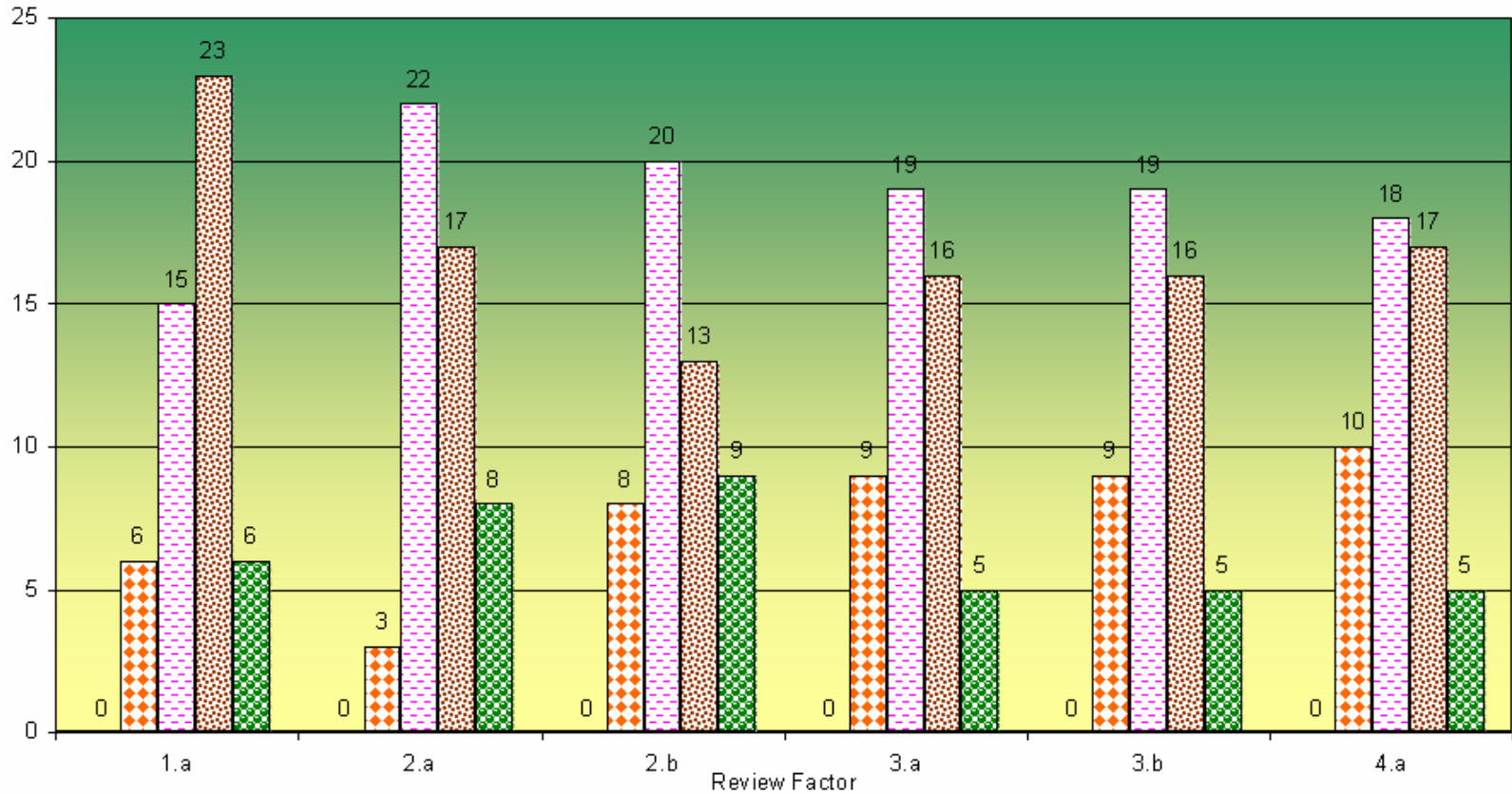
SECA Materials & Manufacturing Rating Data (2 of 2)

Reviewer	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
Other	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	1	3	7	1
2.a	0	0	1	4	6	1
2.b	0	0	0	6	4	2
3.a	0	0	0	6	5	1
3.b	0	0	1	6	4	1
4.a	1	0	1	5	4	1
Sub-Total	1	0	4	30	30	7
Factor Totals	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	3	32	41	8
2.a	0	0	3	37	35	9
2.b	0	0	4	45	28	7
3.a	1	0	5	48	23	7
3.b	1	0	7	43	26	7
4.a	1	0	12	33	32	6
Rating Totals	3	0	34	238	185	44
Non-Industry Team Factor Totals	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	2	12	16	10
2.a	0	0	1	20	9	10
2.b	0	0	1	21	7	11
3.a	1	0	2	20	9	8
3.b	0	0	4	17	10	9
4.a	1	0	7	13	10	9
Rating Totals	2	0	17	103	61	57





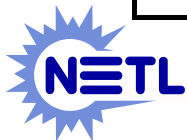
Fuel Processing





Fuel Processing Rating Data (1 of 2)

Reviewer	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
Industry Team						
1.a	0	0	4	11	18	2
2.a	0	0	2	16	15	2
2.b	0	0	6	14	12	3
3.a	1	0	5	16	12	1
3.b	1	0	7	13	13	1
4.a	0	0	7	14	13	1
Sub-Total	2	0	31	84	83	10
National Laboratory	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	0	0	0	0
2.a	0	0	0	0	0	0
2.b	0	0	0	0	0	0
3.a	0	0	0	0	0	0
3.b	0	0	0	0	0	0
4.a	0	0	0	0	0	0
Sub-Total	0	0	0	0	0	0
Government (non-DOE)	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	2	2	3	3
2.a	0	0	1	4	1	4
2.b	0	0	1	5	0	4
3.a	0	0	3	2	2	3
3.b	0	0	1	5	1	3
4.a	0	0	2	3	2	3
Sub-Total	0	0	10	21	9	20





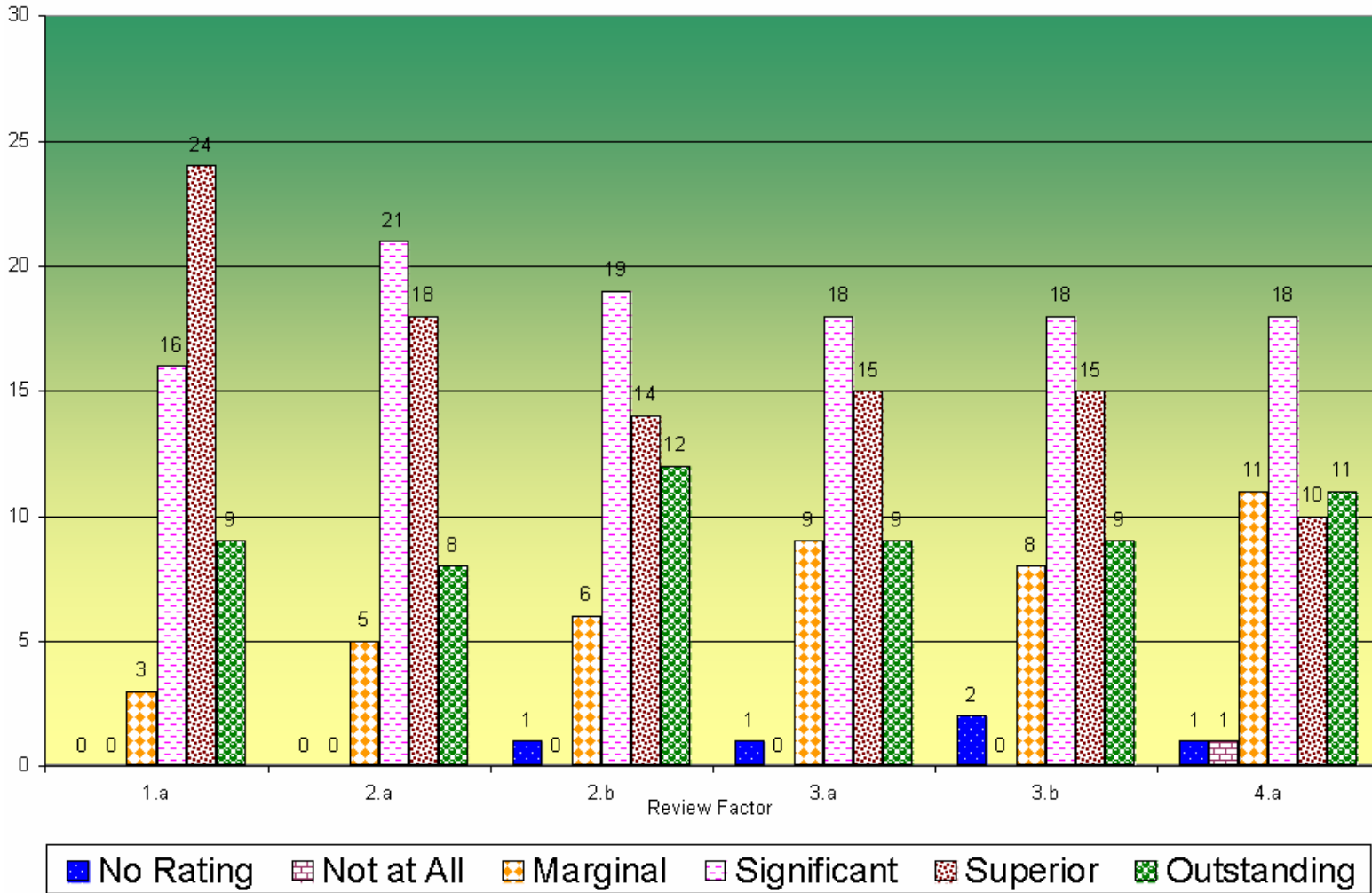
Fuel Processing Rating Data (2 of 2)

Reviewer	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
Other	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	0	2	2	1
2.a	0	0	0	2	1	2
2.b	0	0	1	1	1	2
3.a	0	0	1	1	2	1
3.b	0	0	1	1	2	1
4.a	0	0	1	1	2	1
Sub-Total	0	0	4	8	10	8
Factor Totals	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	6	15	23	6
2.a	0	0	3	22	17	8
2.b	0	0	8	20	13	9
3.a	1	0	9	19	16	5
3.b	1	0	9	19	16	5
4.a	0	0	10	18	17	5
Rating Totals	2	0	45	113	102	38
Non-Industry Team Factor Totals	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	2	4	5	4
2.a	0	0	1	6	2	6
2.b	0	0	2	6	1	6
3.a	0	0	4	3	4	4
3.b	0	0	2	6	3	4
4.a	0	0	3	4	4	4
Rating Totals	0	0	14	29	19	28





Modeling & Simulation





Modeling & Simulation Rating Data (1 of 2)

Reviewer Industry Team	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	3	9	21	2
2.a	0	0	5	14	15	2
2.b	0	0	5	13	13	3
3.a	0	0	7	14	12	2
3.b	0	0	6	13	14	2
4.a	0	1	9	13	9	3
Sub-Total	0	1	35	76	84	14
National Laboratory	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	0	1	0	0
2.a	0	0	0	1	0	0
2.b	0	0	0	1	0	0
3.a	0	0	0	0	1	0
3.b	0	0	0	1	0	0
4.a	0	0	0	0	1	0
Sub-Total	0	0	0	4	2	0
National Laboratory	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	0	3	1	6
2.a	0	0	0	3	1	6
2.b	1	0	0	2	1	6
3.a	1	0	1	1	1	6
3.b	1	0	1	2	0	6
4.a	1	0	1	2	0	6
Sub-Total	4	0	3	13	4	36





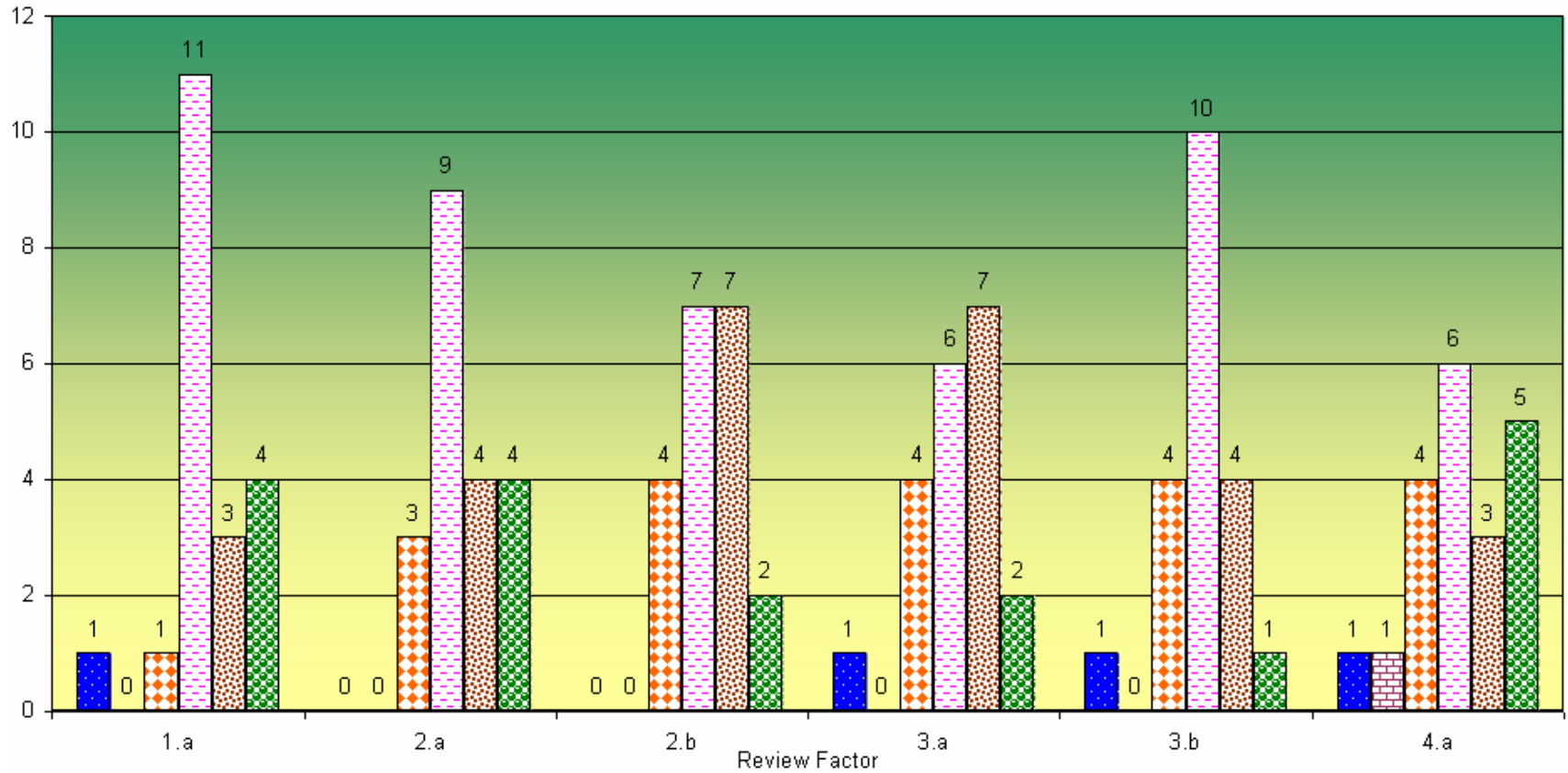
Modeling & Simulation Rating Data (2 of 2)

Reviewer	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
National Laboratory	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	0	3	2	1
2.a	0	0	0	3	2	1
2.b	0	0	1	3	0	2
3.a	0	0	1	3	1	1
3.b	1	0	1	2	1	1
4.a	0	0	1	3	0	2
Sub-Total	1	0	4	17	6	8
Factor Totals	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	3	16	24	9
2.a	0	0	5	21	18	8
2.b	1	0	6	19	14	12
3.a	1	0	9	18	15	9
3.b	2	0	8	18	15	9
4.a	1	1	11	18	10	11
Rating Totals	5	1	42	110	96	58
Non-Industry Team	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
Factor Totals	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	0	7	3	7
2.a	0	0	0	7	3	7
2.b	1	0	1	6	1	8
3.a	1	0	2	4	3	7
3.b	2	0	2	5	1	7
4.a	1	0	2	5	1	8
Rating Totals	5	0	7	34	12	44





Power Electronics, Controls & Diagnostics



■ No Rating ■ Not at All ■ Marginal ■ Significant ■ Superior ■ Outstanding





Power Electronics, Controls & Diagnostics Rating Data (1 of 2)

Reviewer Industry Team	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	1	0	0	9	1	2
2.a	0	0	2	8	2	1
2.b	0	0	4	5	4	0
3.a	1	0	4	5	3	0
3.b	0	0	4	7	2	0
4.a	0	1	4	5	0	2
Sub-Total	2	1	18	39	12	5
National Laboratory	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	0	0	0	0
2.a	0	0	0	0	0	0
2.b	0	0	0	0	0	0
3.a	0	0	0	0	0	0
3.b	0	0	0	0	0	0
4.a	0	0	0	0	0	0
Sub-Total	0	0	0	0	0	0
Government (non-DOE)	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	0	1	0	1
2.a	0	0	0	0	1	1
2.b	0	0	0	0	1	1
3.a	0	0	0	0	1	1
3.b	0	0	0	1	0	1
4.a	0	0	0	0	1	1
Sub-Total	0	0	0	2	4	6





Power Electronics, Controls & Diagnostics Rating Data (2 of 2)

Reviewer	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
Other	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	1	1	2	1
2.a	0	0	1	1	1	2
2.b	0	0	0	2	2	1
3.a	0	0	0	1	3	1
3.b	1	0	0	2	2	0
4.a	0	0	0	1	2	2
Sub-Total	1	0	2	8	12	7
Factor Totals	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	1	0	1	11	3	4
2.a	0	0	3	9	4	4
2.b	0	0	4	7	7	2
3.a	1	0	4	6	7	2
3.b	1	0	4	10	4	1
4.a	1	1	4	6	3	5
Rating Totals	4	1	20	49	28	18
Non-Industry Team Factor Totals	No Rating	Not at All	Marginal	Significant	Superior	Outstanding
1.a	0	0	1	2	2	2
2.a	0	0	1	1	2	3
2.b	0	0	0	2	3	2
3.a	0	0	0	1	4	2
3.b	1	0	0	3	2	1
4.a	0	0	0	1	3	3
Rating Totals	1	0	2	10	16	13

