

# SOUTHERN INTERTIE

## presentation by Don Zoerb to Matanuska Electric Board on 7/8/03

### Southern Intertie Project

**Overhead 138kV Transmission Line from Nikiski to Pt. Possession**  
*(Using existing Tesoro pipeline Right of Way along  
north coast of Kenai Peninsula)*

**Submarine Cable crossing from Pt. Possession to Pt. Woronzoff**  
*(Pt. Woronzoff is near Stevens International Airport;  
point of interconnection with existing CEA transmission  
facilities)*

**State of Alaska appropriated \$46,800,000 in 1993**

**"Interest Issue" Related to 1993 Grant Transfer and Administration  
Agreement**  
*(Issue was resolved in 2003)*

1

### Southern Intertie Project

Estimated Initial Project Cost		118,800,000
Original Grant	46,800,000	
Less: Expended to Date (EIS)	7,000,000	
Remaining Grant	<u>39,800,000</u> =====	(39,800,000)
Difference - To Be Funded By Utilities		<u>79,000,000</u> =====
Estimated Project Life - Overhead Portion		38 Years
Estimated Project Life - Submarine Portion		23 Years
Estimated Cost to Replace Submarine Cable in 23 Years		92,300,000

2

## Southern Intertie Project

### Initial Allocation of Shares

Chugach	30.23%
MEA	14.19%
Homer	11.60%
ML&P	22.43%
GVEA	20.11%
Seward	1.44%
	<u>100.00%</u> =====

***Irrevocable "Decision Date" = July 15, 2003***

Abandoned Shares Subject to Voluntary/Mandatory Reallocation

**CEA's Economic Evaluations**

**March, 1998 Public Study -  
Future Benefits** **143,500,000**

*Feb*  
~~**March, 1998 Secret Study -  
Future Benefits**~~ **56,700,000**

Difference - Public vs. Secret Studies, Same  
Month, Same Consultant **86,800,000**  
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*Note: Existence of the Secret Study was disclosed by CEA's  
Board of Directors in December, 2002*

**November, 2002 Preliminary Evaluation**  
**Net Present Value** **21,648,000**

Assumed Construction Cost 100,000,000

Assumed Grant Funding 70,728,000

*Note: Current Estimated Construction Cost is \$118,800,000  
and Grant Funding is approximately 39,800,000*

**June, 2003 Updated Economic Evaluation** †  
**Net Present Value (Negative)** **(6,000,000)**

*Note: Includes \$300,600,000 of future "Reliability Benefits"  
(\$46,000,000 present value) based on following values  
of unserved energy:*

CEA	\$14.00	per kWh
Seward	\$17.00	per kWh
MEA	\$12.00	per kWh
ML&P	\$14.00	per kWh
GVEA	\$14.00	per kWh
Homer	\$16.00	per kWh

4

**MEA's Review of CEA's Economic Evaluations**

**CEA's November, 2002 Preliminary Evaluation**  
**CEA Claimed Net Present Value** **21,648,000**

**MEA Calculated Negative Present  
Value** **(34,132,000)**

**CEA's June, 2003 Updated Economic Evaluation**  
**CEA Claims Negative Present Value** **(6,000,000)**

**MEA Calculates Negative Present  
Value** **(58,800,000)**

\*\*\*\*\* Costs (\$millions) \*\*\*\*\*

\*\*\*\*\* Benefits (\$millions) \*\*\*\*\*

	Initial Cost & SubCable Repl.	O&M Costs	Grant Funds	Total Cost	Production Cost Savings	Reliability Benefits	Avoided Outages	115kV Line Rebuild Savings	Total Benefits	Net Savings (Detriment)
2003	0.5	0.0	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	10.0	0.0	-10.0	0.0	0.0	0.0	0.6	5.0	5.6	5.6
2005	35.0	0.0	-29.2	5.8	0.0	0.0	0.6	5.0	5.6	-0.2
2006	65.0	0.0	0.0	65.0	0.0	0.0	0.6	5.0	5.6	-59.4
2007	8.3	0.4	0.0	8.7	0.8	2.7	0.8	5.0	9.3	0.5
2008	0.0	0.4	0.0	0.4	0.8	2.8	0.8	0.5	4.9	4.5
2009	0.0	0.5	0.0	0.5	0.8	3.0	0.9	0.5	5.1	4.7
2010	0.0	0.5	0.0	0.5	0.8	3.1	0.9	0.5	5.3	4.8
2011	0.0	0.5	0.0	0.5	0.8	3.2	0.9	0.5	5.5	5.0
2012	0.0	0.5	0.0	0.5	0.9	3.4	0.9	0.5	5.7	5.2
2013	0.0	0.5	0.0	0.5	0.9	3.6	1.0	0.5	5.9	5.4
2014	0.0	0.5	0.0	0.5	0.9	3.7	1.0	-4.5	1.1	0.6
2015	0.0	0.5	0.0	0.5	0.9	3.9	0.3	-4.5	0.7	0.1
2016	0.0	0.6	0.0	0.6	1.0	4.1	0.3	-4.5	0.9	0.3
2017	0.0	0.6	0.0	0.6	1.0	4.3	0.3	-4.5	1.1	0.5
2018	0.0	0.6	0.0	0.6	1.0	4.5	0.4	0.0	5.8	5.3
2019	0.0	0.6	0.0	0.6	1.0	4.7	0.4	0.0	6.1	5.5
2020	0.0	0.6	0.0	0.6	1.1	4.9	0.4	0.0	6.3	5.7
2021	0.0	0.6	0.0	0.6	1.1	5.1	0.4	0.0	6.6	6.0
2022	0.0	0.7	0.0	0.7	1.1	5.4	0.4	0.0	6.9	6.2
2023	0.0	0.7	0.0	0.7	1.2	5.6	0.4	0.0	7.2	6.5
2024	0.0	0.7	0.0	0.7	1.2	5.9	0.4	0.0	7.5	6.8
2025	0.0	0.7	0.0	0.7	1.2	6.1	0.4	0.0	7.8	7.1
2026	0.0	0.7	0.0	0.7	1.3	6.4	0.4	0.0	8.1	7.4
2027	0.0	0.7	0.0	0.7	1.3	6.7	0.5	0.0	8.5	7.7
2028	0.0	0.8	0.0	0.8	1.3	7.0	0.5	0.0	8.8	8.1
2029	92.3	0.8	0.0	93.1	1.4	7.4	0.5	0.0	9.2	-83.9
2030	0.0	0.8	0.0	0.8	1.4	7.7	0.5	0.0	9.6	8.8
2031	0.0	0.8	0.0	0.8	1.5	8.1	0.5	0.0	10.0	9.2
2032	0.0	0.9	0.0	0.9	1.5	8.4	0.5	0.0	10.5	9.6
2033	0.0	0.9	0.0	0.9	1.5	8.8	0.5	0.0	10.9	10.0
2034	0.0	0.9	0.0	0.9	1.6	9.2	0.6	0.0	11.4	10.5
2035	0.0	0.9	0.0	0.9	1.6	9.7	0.6	0.0	11.9	10.9
2036	0.0	1.0	0.0	1.0	1.7	10.1	0.6	0.0	12.4	11.4
2037	0.0	1.0	0.0	1.0	1.7	10.6	0.6	0.0	12.9	11.9
2038	0.0	1.0	0.0	1.0	1.8	11.1	0.6	0.0	13.5	12.5
2039	0.0	1.0	0.0	1.0	1.8	11.6	0.6	0.0	14.0	13.0
2040	0.0	1.1	0.0	1.1	1.9	12.1	0.7	0.0	14.7	13.6
2041	0.0	1.1	0.0	1.1	1.9	12.7	0.7	0.0	15.3	14.2
2042	0.0	1.1	0.0	1.1	2.0	13.3	0.7	0.0	16.0	14.8
2043	0.0	1.2	0.0	1.2	2.0	13.9	0.7	0.0	16.6	15.5
2044	0.0	1.2	0.0	1.2	2.1	14.6	0.7	0.0	17.4	16.2
2045	0.0	1.2	0.0	1.2	2.1	15.2	0.7	0.0	18.1	16.9
2046	0.0	1.3	0.0	1.3	2.2	15.9	0.8	0.0	18.9	17.7
	<u>211.1</u>	<u>31.0</u>	<u>-39.7</u>	<u>202.4</u>	<u>54.1</u>	<u>300.6</u>	<u>25.4</u>	<u>5.0</u>	<u>385.1</u>	<u>182.7</u>

Present Value: 109.9      5.7      -34.8      80.9      9.9      46.0      7.7      11.4      74.9      -6.0  
AAA  
**Negative Present Value**

CEA's Southern Intertie Economic Evaluation

June, 2003

Adjusted for Depreciation, Cost of Capital, Rebuild Timing, Revised Life on Submarine Cable, No Reliability Benefits

\*\*\*\*\* Costs (\$millions) \*\*\*\*\*

\*\*\*\*\* Benefits (\$millions) \*\*\*\*\*

	Deprec Expense	Cost of Capital	O&M Costs	Total Cost	Production Cost Savings	Reliability Benefits	Avoided Outages	115kV Line Rebuild Savings	Total Benefits	Net Savings (Detriment)
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.6	0.6
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.6	0.6
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.6	0.6
2007	2.1	4.1	0.4	6.6	0.8	0.0	0.8	0.0	1.6	-5.1
2008	2.1	4.1	0.4	6.6	0.8	0.0	0.8	0.5	2.1	-4.5
2009	2.1	4.1	0.5	6.6	0.8	0.0	0.9	0.5	2.2	-4.5
2010	2.1	4.1	0.5	6.7	0.8	0.0	0.9	0.5	2.2	-4.5
2011	2.1	4.1	0.5	6.7	0.8	0.0	0.9	0.5	2.2	-4.4
2012	2.1	4.1	0.5	6.7	0.9	0.0	0.9	0.5	2.3	-4.4
2013	2.1	4.1	0.5	6.7	0.9	0.0	1.0	0.5	2.3	-4.4
2014	2.1	4.1	0.5	6.7	0.9	0.0	1.0	0.5	2.4	-4.3
2015	2.1	4.1	0.5	6.7	0.9	0.0	0.3	0.5	1.8	-5.0
2016	2.1	4.1	0.6	6.7	1.0	0.0	0.3	0.5	1.8	-4.9
2017	2.1	4.1	0.6	6.8	1.0	0.0	0.3	0.5	1.8	-4.9
2018	2.1	4.1	0.6	6.8	1.0	0.0	0.4	0.0	1.4	-5.4
2019	2.1	4.1	0.6	6.8	1.0	0.0	0.4	0.0	1.4	-5.4
2020	2.1	4.1	0.6	6.8	1.1	0.0	0.4	0.0	1.4	-5.4
2021	2.1	4.1	0.6	6.8	1.1	0.0	0.4	0.0	1.5	-5.3
2022	2.1	4.1	0.7	6.8	1.1	0.0	0.4	0.0	1.5	-5.3
2023	2.1	4.1	0.7	6.9	1.2	0.0	0.4	0.0	1.6	-5.3
2024	2.1	4.1	0.7	6.9	1.2	0.0	0.4	0.0	1.6	-5.3
2025	2.1	4.1	0.7	6.9	1.2	0.0	0.4	0.0	1.7	-5.2
2026	2.1	4.1	0.7	6.9	1.3	0.0	0.4	0.0	1.7	-5.2
2027	6.4	8.7	0.7	15.8	1.3	0.0	0.5	0.0	1.8	-14.1
2028	6.4	8.7	0.8	15.9	1.3	0.0	0.5	0.0	1.8	-14.1
2029	6.4	8.7	0.8	15.9	1.4	0.0	0.5	0.0	1.9	-14.0
2030	6.4	8.7	0.8	15.9	1.4	0.0	0.5	0.0	1.9	-14.0
2031	6.4	8.7	0.8	15.9	1.5	0.0	0.5	0.0	2.0	-14.0
2032	6.4	8.7	0.9	16.0	1.5	0.0	0.5	0.0	2.0	-13.9
2033	6.4	8.7	0.9	16.0	1.5	0.0	0.5	0.0	2.1	-13.9
2034	6.4	8.7	0.9	16.0	1.6	0.0	0.6	0.0	2.1	-13.9
2035	6.4	8.7	0.9	16.0	1.6	0.0	0.6	0.0	2.2	-13.8
2036	6.4	8.7	1.0	16.1	1.7	0.0	0.6	0.0	2.3	-13.8
2037	6.4	8.7	1.0	16.1	1.7	0.0	0.6	0.0	2.3	-13.8
2038	6.4	8.7	1.0	16.1	1.8	0.0	0.6	0.0	2.4	-13.7
2039	6.4	8.7	1.0	16.1	1.8	0.0	0.6	0.0	2.4	-13.7
2040	6.4	8.7	1.1	16.2	1.9	0.0	0.7	0.0	2.5	-13.7
2041	6.4	8.7	1.1	16.2	1.9	0.0	0.7	0.0	2.6	-13.6
2042	6.4	8.7	1.1	16.2	2.0	0.0	0.7	0.0	2.7	-13.6
2043	6.4	8.7	1.2	16.3	2.0	0.0	0.7	0.0	2.7	-13.5
2044	6.4	8.7	1.2	16.3	2.1	0.0	0.7	0.0	2.8	-13.5
2045	4.4	4.5	1.2	10.1	2.1	0.0	0.7	0.0	2.9	-7.2
2046	4.4	4.5	1.3	10.2	2.2	0.0	0.8	0.0	3.0	-7.2
	<u>166.4</u>	<u>247.1</u>	<u>31.0</u>	<u>444.5</u>	<u>54.1</u>	<u>0.0</u>	<u>25.4</u>	<u>5.0</u>	<u>84.5</u>	<u>-360.0</u>

Present Value:

26.8	46.2	5.7	78.8	9.9	0.0	7.7	2.5	20.0	-58.8
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Negative Present Value

## **Southern Intertie Project**

### **Conclusion**

**No discernable benefits to MEA members.**

**Multi-million dollar negative financial impact.**

**Significant exposure to cost overruns.**

**Would require future rate increases to fund negative financial impacts.**