

AIR PERMIT APPLICATION FOR  
FLORIDA POWER  
HINES ENERGY CENTER, POWER BLOCK 3  
POLK COUNTY, FLORIDA

PREPARED BY  
GOLDER ASSOCIATES INC.  
6241 NW 23RD STREET, SUITE 500  
GAINESVILLE, FLORIDA 32653-1500  
(352) 336-5600

AUGUST, 2002  
PROJECT NO. 023-7539  
ISCST3 AIR MODELING FILES  
FILE CONTENTS

**1. ISCST3 MODEL OUTPUT**  
(SEE APPENDIX D TO THE PSD APPLICATION)

**1.1. PROJECT IMPACTS ONLY**  
**LOAD ANALYSES FOR DETERMINING WORST-CASE OPERATING LOAD**  
**NATURAL GAS- AND DISTILLATE OIL-FIRING**  
**PSD CLASS II AREA**

MODELING.ZIP- ZIPPED FILE CONTAINING THE FOLLOWING:

HINES3NG.I<YY>/ O<YY>	ISCST INPUT/OUTPUT FILES FOR 5 YEARS FROM 1991 TO 1995 GENERIC MODEL RESULTS FOR NATURAL GAS-FIRING USING 10 G/S EMISSION RATE FOR 2 HRSG STACKS (YY= LAST 2 DIGITS OF YEAR)
HINES3NY.SUM	SUMMARY OF MAXIMUM CONCENTRATIONS FROM THE ISCST3 MODEL FOR EACH YEAR
HINES3FO.I<YY>/ O<YY>	ISCST INPUT/OUTPUT FILES FOR 5 YEARS FROM 1991 TO 1995 GENERIC MODEL RESULTS FOR FUEL OIL-FIRING USING 10 G/S EMISSION RATE FOR 2 HRSG STACKS (YY= LAST 2 DIGITS OF YEAR)
HINESFY.SUM	SUMMARY OF MAXIMUM CONCENTRATIONS FROM THE ISCST3 MODEL FOR EACH YEAR

	1993	4.02860	117.	447.	93031316
	1994	2.54204	45.	566.	94060816
	1995	2.78909	150.	500.	95020416
HIGH 3-Hour					
	1991	4.37886	127.	500.	91021515
	1992	4.38520	150.	500.	92042712
	1993	7.85773	130.	500.	93031315
	1994	4.18128	127.	500.	94030315
	1995	3.60922	50.	781.	95072312
HIGH 1-Hour					
	1991	7.88050	53.	500.	91092513
	1992	7.61002	340.	1500.	92072511
	1993	13.93337	76.	412.	93031306
	1994	7.71810	240.	1500.	94060111
	1995	8.30506	76.	412.	95072215
SOURCE GROUP ID:	LD8020				
Annual					
	1991	0.06509	240.	10000.	91123124
	1992	0.07123	90.	2500.	92123124
	1993	0.07061	90.	3000.	93123124
	1994	0.05996	60.	2500.	94123124
	1995	0.06694	70.	2500.	95123124
HIGH 24-Hour					
	1991	0.92981	130.	500.	91021524
	1992	0.89198	90.	2500.	92073124
	1993	1.54376	117.	447.	93031324
	1994	0.98418	130.	500.	94030324
	1995	0.96807	150.	500.	95020424
HIGH 8-Hour					
	1991	1.85133	90.	3000.	91060216
	1992	2.66331	150.	500.	92042716
	1993	3.36940	117.	447.	93031316
	1994	1.96897	130.	500.	94030316
	1995	2.21141	150.	500.	95020416
HIGH 3-Hour					
	1991	3.38952	127.	500.	91021515
	1992	3.90305	150.	500.	92042712
	1993	6.51022	130.	500.	93031315
	1994	3.27962	127.	500.	94030315
	1995	3.28828	50.	1000.	95072215
HIGH 1-Hour					
	1991	7.46279	72.	949.	91061912
	1992	7.35324	30.	1000.	92070211
	1993	12.13336	76.	412.	93031306
	1994	7.31123	20.	1000.	94080511
	1995	7.88208	260.	1500.	95090311

SOURCE GROUP ID: LD8059

Annual

1991	0.06948	240.	10000.	91123124
1992	0.07598	90.	2500.	92123124
1993	0.07521	90.	2500.	93123124
1994	0.06356	60.	2500.	94123124
1995	0.07153	70.	2500.	95123124

HIGH 24-Hour

1991	1.01962	130.	500.	91021524
1992	0.98138	150.	500.	92042724
1993	1.66934	117.	447.	93031324
1994	1.05870	130.	500.	94030324
1995	1.05563	150.	500.	95020424

HIGH 8-Hour

1991	1.99851	130.	500.	91021516
1992	2.80147	150.	500.	92042716
1993	3.62148	117.	447.	93031316
1994	2.12884	130.	500.	94030316
1995	2.42724	150.	500.	95020416

HIGH 3-Hour

1991	3.75833	127.	500.	91021515
1992	4.08745	150.	500.	92042712
1993	7.02434	130.	500.	93031315
1994	3.75868	45.	566.	94060815
1995	3.37789	50.	781.	95072312

HIGH 1-Hour

1991	7.51108	72.	949.	91061912
1992	7.41138	30.	1000.	92070211
1993	12.83224	76.	412.	93031306
1994	7.37488	20.	1000.	94080511
1995	7.92516	260.	1500.	95090311

SOURCE GROUP ID: LD8095

Annual

1991	0.07975	240.	5000.	91123124
1992	0.08722	90.	2500.	92123124
1993	0.08623	90.	2500.	93123124
1994	0.07212	60.	2500.	94123124
1995	0.08031	70.	2500.	95123124

HIGH 24-Hour

1991	1.25934	130.	500.	91021524
1992	1.14473	150.	500.	92042724
1993	1.94409	117.	447.	93031324
1994	1.24769	130.	500.	94030324
1995	1.29532	150.	500.	95020424

HIGH 8-Hour

1991	2.45193	130.	500.	91021516
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	1992	3.14935	150.	500.	92042716
	1993	4.16677	117.	447.	93031316
	1994	2.61373	45.	566.	94060816
HIGH 3-Hour	1995	2.91555	150.	500.	95020416
	1991	4.59621	127.	500.	91021515
	1992	4.48638	150.	500.	92042712
	1993	8.14133	130.	500.	93031315
	1994	4.38680	127.	500.	94030315
HIGH 1-Hour	1995	3.68470	50.	781.	95072312
	1991	9.59908	170.0	1000.3	91070912
	1992	7.65886	340.	1500.	92072511
	1993	14.29988	76.	412.	93031306
	1994	7.89484	135.	566.	94010417
SOURCE GROUP ID: LD6520	1995	8.47174	76.	412.	95072215
Annual					
	1991	0.07300	240.	5000.	91123124
	1992	0.07948	90.	2500.	92123124
	1993	0.07871	90.	2500.	93123124
	1994	0.06636	60.	2500.	94123124
HIGH 24-Hour	1995	0.07427	70.	2500.	95123124
	1991	1.08031	130.	500.	91021524
	1992	1.01947	150.	500.	92042724
	1993	1.75549	117.	447.	93031324
	1994	1.11066	130.	500.	94030324
HIGH 8-Hour	1995	1.11648	150.	500.	95020424
	1991	2.13810	130.	500.	91021516
	1992	2.90981	150.	500.	92042716
	1993	3.79334	117.	447.	93031316
	1994	2.42139	45.	566.	94060816
HIGH 3-Hour	1995	2.57793	150.	500.	95020416
	1991	4.01660	127.	500.	91021515
	1992	4.21310	150.	500.	92042712
	1993	7.37571	130.	500.	93031315
	1994	3.89644	45.	566.	94060815
HIGH 1-Hour	1995	3.47722	50.	781.	95072312
	1991	7.58179	53.	500.	91092513
	1992	7.45166	30.	1000.	92070211
	1993	13.30105	76.	412.	93031306
	1994	7.41991	20.	1000.	94080511

	1995	8.01987	76.	412.	95072215
SOURCE GROUP ID:	LD6559				
Annual					
	1991	0.07794	240.	5000.	91123124
	1992	0.08441	90.	2500.	92123124
	1993	0.08363	90.	2500.	93123124
	1994	0.07059	60.	2500.	94123124
	1995	0.07862	70.	2500.	95123124
HIGH 24-Hour					
	1991	1.21549	130.	500.	91021524
	1992	1.11832	150.	500.	92042724
	1993	1.88785	117.	447.	93031324
	1994	1.20492	130.	500.	94030324
	1995	1.25305	150.	500.	95020424
HIGH 8-Hour					
	1991	2.35719	130.	500.	91021516
	1992	3.07755	150.	500.	92042716
	1993	4.05580	117.	447.	93031316
	1994	2.55610	45.	566.	94060816
	1995	2.81383	150.	500.	95020416
HIGH 3-Hour					
	1991	4.42137	127.	500.	91021515
	1992	4.40510	150.	500.	92042712
	1993	7.91352	130.	500.	93031315
	1994	4.22148	127.	500.	94030315
	1995	3.62419	50.	781.	95072312
HIGH 1-Hour					
	1991	7.91501	53.	500.	91092513
	1992	7.61973	340.	1500.	92072511
	1993	14.00578	76.	412.	93031306
	1994	7.72866	240.	1500.	94060111
	1995	8.33791	76.	412.	95072215
SOURCE GROUP ID:	LD6595				
Annual					
	1991	0.08402	240.	5000.	91123124
	1992	0.09221	90.	2500.	92123124
	1993	0.09159	90.	2500.	93123124
	1994	0.07681	60.	2000.	94123124
	1995	0.08475	70.	2500.	95123124
HIGH 24-Hour					
	1991	1.36686	130.	500.	91021524
	1992	1.22307	150.	500.	92042724
	1993	2.07815	117.	447.	93031324
	1994	1.38144	130.	500.	94030324
	1995	1.44360	150.	500.	95020424
HIGH 8-Hour					

	1991	2.68159	130.	500.	91021516
	1992	3.32741	150.	500.	92042716
	1993	4.43003	117.	447.	93031316
	1994	2.79268	130.	500.	94030316
	1995	3.16139	150.	500.	95020416
HIGH	3-Hour				
	1991	5.01951	127.	500.	91021515
	1992	4.67953	150.	500.	92042712
	1993	8.68267	130.	500.	93031315
	1994	4.78683	127.	500.	94030315
	1995	3.82452	50.	781.	95072312
HIGH	1-Hour				
	1991	9.64741	170.0	1000.3	91070912
	1992	7.74865	340.	1500.	92072511
	1993	14.98886	76.	412.	93031306
	1994	8.48307	60.	1000.	94071711
	1995	8.78794	76.	412.	95072215

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

ISCST3 OUTPUT FILE NUMBER 1 :HINES3FO.091  
 ISCST3 OUTPUT FILE NUMBER 2 :HINES3FO.092  
 ISCST3 OUTPUT FILE NUMBER 3 :HINES3FO.093  
 ISCST3 OUTPUT FILE NUMBER 4 :HINES3FO.094  
 ISCST3 OUTPUT FILE NUMBER 5 :HINES3FO.095

First title for last output file is: 1991 FPC GENERIC Fuel Oil 10/30/01  
 Second title for last output file is: HINES 3, WESTINGHOUSE- 3 TEMP. (20,59,105 oF)

AVERAGING TIME	YEAR	CONC (ug/m3)	DIRECTION (degree)	DISTANCE (m)	PERIOD ENDING (YYMMDDHH)
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SOURCE GROUP ID: BASE20					
Annual					
	1991	0.06442	240.	10000.	91123124
	1992	0.07037	90.	2500.	92123124
	1993	0.06975	90.	3000.	93123124
	1994	0.05940	60.	2500.	94123124
	1995	0.06559	70.	2500.	95123124
HIGH 24-Hour					
	1991	0.91864	130.	500.	91021524
	1992	0.88339	90.	2500.	92073124
	1993	1.52212	117.	447.	93031324
	1994	0.97149	130.	500.	94030324
	1995	0.95326	150.	500.	95020424
HIGH 8-Hour					
	1991	1.83363	90.	3000.	91060216
	1992	2.63989	150.	500.	92042716
	1993	3.32579	117.	447.	93031316
	1994	1.94173	130.	500.	94030316
	1995	2.17471	150.	500.	95020416
HIGH 3-Hour					
	1991	3.34227	127.	500.	91021515
	1992	3.87112	150.	500.	92042712
	1993	6.42142	130.	500.	93031315
	1994	3.22339	127.	500.	94030315
	1995	3.27633	50.	1000.	95072215
HIGH 1-Hour					
	1991	7.45440	72.	949.	91061912
	1992	7.34331	30.	1000.	92070211
	1993	12.01100	76.	412.	93031306
	1994	7.30055	20.	1000.	94080511
	1995	7.87445	260.	1500.	95090311
SOURCE GROUP ID: BASE59					

Annual

1991	0.06739	240.	10000.	91123124
1992	0.07371	90.	2500.	92123124
1993	0.07316	90.	2500.	93123124
1994	0.06185	60.	2500.	94123124
1995	0.06903	70.	2500.	95123124

HIGH 24-Hour

1991	0.97127	130.	500.	91021524
1992	0.92252	90.	2500.	92073124
1993	1.61084	117.	447.	93031324
1994	1.02381	130.	500.	94030324
1995	1.01436	150.	500.	95020424

HIGH 8-Hour

1991	1.91359	130.	500.	91021516
1992	2.73585	150.	500.	92042716
1993	3.50428	117.	447.	93031316
1994	2.05400	130.	500.	94030316
1995	2.32611	150.	500.	95020416

HIGH 3-Hour

1991	3.58536	127.	500.	91021515
1992	4.00174	150.	500.	92042712
1993	6.78511	130.	500.	93031315
1994	3.66542	45.	566.	94060815
1995	3.32494	50.	1000.	95072215

HIGH 1-Hour

1991	7.48867	72.	949.	91061912
1992	7.38419	30.	1000.	92070211
1993	12.50901	76.	412.	93031306
1994	7.34490	20.	1000.	94080511
1995	7.90534	260.	1500.	95090311

SOURCE GROUP ID: BASE95

Annual

1991	0.07734	240.	5000.	91123124
1992	0.08390	90.	2500.	92123124
1993	0.08307	90.	2500.	93123124
1994	0.06988	60.	2500.	94123124
1995	0.07815	70.	2500.	95123124

HIGH 24-Hour

1991	1.16823	130.	500.	91021524
1992	1.11188	150.	500.	92042724
1993	1.87409	117.	447.	93031324
1994	1.19480	130.	500.	94030324
1995	1.24277	150.	500.	95020424

HIGH 8-Hour

1991	2.33416	130.	500.	91021516
1992	3.06004	150.	500.	92042716