

Chris Fullarton First Wind Energy, LLC via e-mail: cfullarton@firstwind.com

August 20, 2013

Subject: Blue Sky West, LLC and Blue Sky West II, LLC (Bingham Wind Project) Decommissioning Budget

Dear Chris:

Sewall was requested to develop this Decommissioning Budget for the 62 Siemens wind turbine generator (WTG) Bingham Wind Project located in the towns of Bingham, Moscow, Parkman, Abbot, Mayfield TWP, and Kingsbury PLT in Somerset and Piscataquis Counties, Maine. The budget represents an opinion of probable cost (OPC), in today's dollars, for decommissioning based on the assumption that the wind turbines, and other project components will be disassembled and disposed following completion of use. The budget is also built on the assumption that the cost of decommissioning will be fully or partially offset by the scrap / salvage value of the towers and turbine components.

Based on information provided from First Wind, it is assumed that all new project roads will remain.

#### Information Sources for this Review

This review is based on the civil and electrical site plans and quantity information provided by First Wind, discussions with contractors familiar with this type of construction and our own experience with wind projects. Wage rates used in these estimates are based on the State of Maine Department of Labor, Bureau of Labor Standards; 2013 Fair Minimum Wage Rates, Heavy and Bridge; Somerset County.

#### **Decommissioning Scope**

The decommissioning process reflected in this OPC is based on Decommissioning Plans prepared for similar wind projects.

In summary, the decommissioning and restoration process in the Plan consists of the following steps:

- Disassembly and removal of above-ground structures
- Removal of below-ground structures to a depth of 24 inches
- Re-grading and seeding

Above-ground structures include the turbines, transformers, substation, Dynamic Reactive Device, overhead collection and generator-lead lines, and meteorological towers. Below-ground structures include turbine and collection system foundations; and drainage control structures (e.g., culverts) as necessary to restore turbine sites. Following removal of all above- and below-ground structures to 24 inches below grade, the individual disturbed areas will be re-graded to be consistent with surrounding areas and reseeded to promote re-vegetation. The cost for disposal for any materials that are not scrapped is considered incidental, unless otherwise noted.



# **Decommissioning Budget**

The decommissioning process has been divided into nine (9) general work items. Quantities and unit prices for these individual work items are presented and discussed in detail in the following paragraphs.

- 1. Project Management (contractor costs, equipment, etc.)
- 2. Site Work/Civil (site reclamation)
- 3. Wind Turbine Foundations
- 4. Wind Turbine Generators and MET Towers
- 5. Electrical Collection System
- 6. Electrical Substation
- 7. Electrical GenLead
- 8. Dynamic Reactive Device Facility
- 9. Operation & Maintenance Building

#### 1. Project Management

1.1 Mobilization

Total opinion of probable costs for Project Management:	\$ 1,825,600.00	
1.4 <u>Contingency</u> . A contingency of approximately 10% of the decommissio recommended to cover unknowns:	\$ 668,400.00	
1.3 <u>Incidentals / Erosion and Sedimentation Control Measures</u> . A budget of of the decommissioning scope is recommended for project incidentals, i sedimentation control measures:	\$ 334,200.00	
1.2 Project Oversight. Oversight of the decommissioning is estimated at:	\$ 403,000.00	
Total estimate for mobilization is:		\$ 420,000.00
C. Mobilization and demobilization of ancillary equipment (i.e. bull dozers, backhoes, etc.) is estimated to be:	\$ 50,000.00	
B. In addition, it is estimated that the cranes will be re-mobilized an additional three (3) times at an estimated cost of \$60,000 per move to reach all of the turbine sites for a total of:	\$ 180,000.00	
A. Mobilization and demobilization to setup and breakdown the crane and assist crane estimated to cost a flat fee of \$95,000 per one-way trip, for a total of:	\$ 190,000.00	

# 2. Site Work/Civil (Site Reclamation)

2.1 Re-grading of turbine sites.

A. The decommissioning plan includes restoring each of the turbine sites. We are assuming that all excavated areas will be brought up to grade and sloped to drain with suitable fill material generated from the re-grading of the turbine site or from off-site sources. The estimated cost includes additional fill, topsoil or other organic matter to support growth, seed, and mulch.

Approximate disturbed area:	12,350	SF/turl	oine site	
Estimated cost per 1000 SF (1 MSF):	\$	330.00	/MSF	
Total estimated re-grading material cost	for all 62 turbine	e sites:	\$	252,700.00

B. This re-grading and restoration work is estimated to take a dozer and operator approximately eight (8) hours to complete at each turbine site.

Labor & equipment rate:	\$	200.00	/hour		
Total re-grading and restoration work for	all 62 turbine sites:		\$	99,200.00	
Total estimate for re-grading turbine sites is:					\$ 351,900.00



2.2 <u>Road Maintenance</u>. Dust control, road maintenance, and post construction road repairs is difficult to estimate. A budget of approximately 1% of the \$10 million estimated for road construction is recommended to address these items.

100,000.00

\$

2.3 <u>Road Widening for Crane Access</u>. All crane paths narrowed at the end of construction will need to be re-widened for decommissioning access. This work is anticipated to include windrowing the vegetation off the former crane roadbed and regrading the current roadbed with grader/roller to smooth out the full width of the crane road. Upon completion of decommissioning, the windrowed vegetation will be regraded to re-narrow the crane roads and reseeded.

А	. Approximate windrowed area: Estimated labor & equipment rate per MSF:	\$	1,277 117.00	MSF			
	Total estimated cost to windrow the material:	π		\$	149,409.00	-	
В			3,146	MSF			
	Estimated labor & equipment rate per MSF:	\$	117.00				
	Total estimated cost to regrade the road:			\$	368,082.00	_	
С	11		1,277	MSF			
	Estimated labor & equipment rate per MSF:	\$	147.00			_	
	Total estimated cost to re-narrow the road:			\$	187,719.00	_	
Т	otal estimate for re-widening the crane roads is:					\$	705,210.00
The t	otal opinion of probable costs for Site Work/C	ivil:				\$	1,157,110.00
3.1 <u>R</u> hy	<u>I Turbine Foundations</u> emoval of WTG foundation to 2 FT below grad ydraulic excavator equipped with hydraulic ram ( arious dozers and loaders.						
3.1 <u>R</u> hy vz T	emoval of WTG foundation to 2 FT below grad ydraulic excavator equipped with hydraulic ram ( arious dozers and loaders. 'otal estimated labor & equipment cost:	(hoe-ram) \$	), an additional 5,500.00	excava /site		et fo	loading, and
3.1 <u>R</u> hy vz T	emoval of WTG foundation to 2 FT below grad ydraulic excavator equipped with hydraulic ram ( arious dozers and loaders.	(hoe-ram) \$	), an additional 5,500.00	excava /site			

Total estimated labor & equipment cost:	\$	400.00 /dump truck trip	
Total estimate for WTG foundation transportation	tion costs f	for all 62 turbine sites:	\$ 148,800.00
The total opinion of probable costs for removal of	WTG Fou	indations:	\$ 489,800.00

#### 4. Wind Turbine Generators and MET Towers

4.1 Disassembly of turbine generators:

A. Disassembly costs for the WTGs are based on the assumption that it will take a 10-man crew 20 hours to



disassemble each tower and turbine, which is roughly equivalent to the labor effort required for tower and turbine assembly.

Estimated labor rate:	\$	25.00	/man	-hour
Total estimate for WTG disassembly for	or all 62 turbines:		\$	310,000.00

- Based on an assumption that the two cranes (erector and assist cranes) can disassembly two (2) turbines a week, the crane rental is estimated to be 31 weeks. Two (2) weeks are added for wind day delays.
   Estimated rental costs for two cranes: \$ 40,000.00 /week
   Total estimate for WTG disassembly equipment for all 62 turbines:
   \$ 1,320,000.00
- C. Additionally, once the towers and turbines are on the ground, they will need to be cut up into manageable sized pieces in preparation for transportation to scrap, recycle, or disposal facilities. We are assuming it will take a 5-man crew 20 hours to do this work per turbine.

Estimated labor rate:	\$	15.00	/man-	hour	
Total estimate for WTG dismantling for	all 62 turbines:		\$	93,000.00	
The total estimate for WTG disassembly is:					\$ 1,723,000.00

4.2 <u>Transportation of turbine components to disposal/reclamation site</u>. Cost to transport the tower and turbine components to facilities for scrap, recycling or disposal are based on a estimated requirement of ten (10) transport vehicles per turbine site (note: transport of new turbine and tower components to a site requires 12 to 14 transport vehicles).

Total estimated labor & equipment cost:	\$	1,400.00	/transport trip	
Total estimate for turbine component transpor	t for all 62	turbine sites:		\$ 868,000.00

4.3 <u>Nacelle housing, blade, and other component disposal.</u> Disposal of the nacelle housing, blades, and other nonscrappable components are based on an estimated 90,000 lbs/turbine. Disposal fees are generally based on weight (in tons).

Total estimated weight of blades and nacelle:		46 tons	
Disposal fee (based on Bangor area landfill rates):			
	\$	133.00 /ton	
Total estimate for nacelle housing and blade dispos	sal for all 62 t	urbine sites:	\$ 379,400.00

#### 4.4 MET Tower disassembly/removal:

A. Disassembly costs for the MET towers are based on the assumption that it will take a 5-man crew 16 hours to disassemble each MET tower.

Estimated labor rate:	\$	25.00	/mai	n-hour
Total estimate for MET disassembly lab	or cost for five (5	) towers:		
			\$	10,000.00

B. Additionally, equipment rental is estimated at approximately 16 hours for each MET tower to assist with the disassembly, partially remove foundations, and reclaim the site.

Total estimated labor & equip. rate:	\$	200.00 /h	nour		
Total estimate for MET disassembly equip	oment cost fo	r five (5)			
towers:		\$		16,000.00	
Total estimate for MET tower disassembly/re	emoval for fiv	e (5) towers is:			\$ 26,000.00

#### 4.5 Transportation of MET tower components to disposal/reclamation site.

A. Cost to transport the MET tower components to facilities for scrap, recycling or disposal are based on an estimated requirement of one (1) truck trip for each MET tower.

Total estimated labor & equip. cost: \$ 920.00 / trip

Total estimate for MET component trucking cost for five (5) towers:

4,600.00

\$



B. We have assumed that the concrete rubble generated from the foundations (while separating rebar as necessary) will not be transported offsite but be used onsite as fill at toes of slopes, for road base or topping material, or at other locations in need of fill as desired by the property owner. In the unlikely event the material cannot be used on-site, the material will be transported for offsite use. Costs to transport the foundation rubble to disposal are based on six (6) cubic yards of rubble for an estimated one (1) dump truck trip per MET tower site and transported to a location within 2 hours (one-way) at an equipment and labor rate of \$100/hr.

Total estimated labor & equip. cost:	\$	400.00	/dump	truck trip	
Total estimate for MET foundation transport	rtation co	st for five (5)			
towers:			\$	2,000.00	
Total estimate for MET tower disposal for five	(5) towers	s is:			\$ 6,600.00
The total opinion of probable costs for WTGs and	MET T	ower removal:			\$ 3,003,000.00

#### 5. Electrical Collection System

Note that as the direct-buried underground collector is buried deeper that 2 ft, it will not be removed but be abandoned in place.

- 5.1 Disassembly of overhead collector lines and associated components:
  - A. Disassembly and spooling costs for the overhead collector lines and associated components are based on the assumption that the labor effort required will be a 3-man crew working for four (4) hours per 1,000 feet of overhead wire.

overhead wire.						
Estimated total length of overhead lines:		93,900	feet			
Estimated labor rate:	\$	35.00	/man-ł	nour		
Total estimate for overhead collector lines of	disassembly:		\$	39,500.00	-	
B. Equipment rates are estimated at the follow	ving rate for	approximately	y 47 day	s.		
Estimated equipment rates:	\$	1,700.00	/day			
Total estimate for overhead collector disass	embly equip	oment:	\$	79,900.00	_	
C. Pole removal and filling of remaining hole,	based on th	e following ap	proxima	ate quantities:		
Amount of poles:		246	each			
Removal labor and equipment costs:	\$	160.00	/pole			
Total estimate for overhead collector pole r	emoval:		\$	39,400.00	-	
Total for disassembly of overhead collector line	es:				\$	158,800.00

#### 5.2 Transportation of collector lines and associated components

A. The cost to transport the collector line and associated components to facilities for scrap, recycling or disposal is based on the number of spools required per collector line sizes and lengths for the project, and a capacity of eight (8) spools per truck.

Estimated spools of collector line:	150 each		
Estimated labor & equipment cost:	\$	1,400.00 /truck trip	
Total estimate for collector lines disassembly:		\$ 26,600.00	

B. Pole removal will be transported at a rate of 30 poles per logging truck. It is assumed that poles will be sold or given away.

Amount of poles:		246 each		
Estimated labor & equipment costs:	\$	1,100.00 /truck	k trip	
Total estimate for overhead collector pole	removal:	\$	9,900.00	
Total for transportation of collector line and as	ssociated con	nponents:		\$ 36,500.00

5.3 <u>Removal of pad-mount transformers</u>. Removal of the pad-mount transformers is estimated to require a total

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labor and equipment cost of \$500 per each				
Total for removal of pad-mount transformed	ers for all 62 turb	oine sites:	\$	31,000.00
5.4 <u>Transportation of pad-mound transformers</u> scrap, recycling or disposal is estimated to 1 of \$225/hr. Assumming three (3) units car	be a location with	nin 2 hours (one-way) a		
Estimated transportation costs:	\$	900.00 /truck tr	rip	
Total for transportation of pad-mount tran	sformers for all (	52 turbine sites:	\$	18,900.00
<ul> <li>5.5 <u>Removal of pad-mount transformer founda</u> cutting of cables and conduits to a depth of equipment.</li> <li>Estimated labor &amp; equipment cost:</li> </ul>				
Total for removal of pad-mount transformer	er foundations fo	or all 62 turbine sites:	\$	62,000.00
5.6 Transportation of pad-mount transformer				

requirement of one (1) dump truck trip for each turbine site.

Total estimated labor & equipment cost:	\$	400.00 /dump truck trip		
Total estimate for foundation transportation costs for all 62 turbine sites:				24,800.00

The total opinion of probable costs for Electrical Collection System removal:	\$	332,000.00
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# 6. Electrical Substation

The costs for removing the substation is difficult to assess. This section gives a general description of the assumptions made for the demolition costs of this item.

# 6.1 Disassembly of substation and associated components.

A. Disassembly costs for the substation is based on the assumption that the labor effort required will be a 5-man crew working for approximately four (4) weeks.

Estimated labor rate:	\$ 35.00	/ma	n-hour
Total estimate for substation disassembly:		\$	28,000.00

B. The disassembly will require a variety of construction equipment; it is difficult to estimate specific equipment requirements. In lieu of specific equipment rates, our opinion of probable cost includes a weekly rental equipment allowance for the assumed four (4) weeks.

Estimated equipment rental rate:	\$	33,000.00	/week			
Total estimate for substation disassembly:			\$	132,000.00	-	
Total for disassembly of substation and associated	d compo	onents:			\$	160,000.00

6.2 <u>Transport substation components to disposal/reclamation site</u>. Costs to transport the substation components to facilities for scrap, recycling or disposal are based on an estimated one (1) truck trip per day for four (4) weeks totaling 20 truck trips from the substation site.

Estimated labor & equipment costs:	\$	1,100.00 /truck trip	
Total for transport of substation components to	) disposal,	/reclamation site:	\$ 22,000.00

6.3 Removal and transportation/disposal of substation foundations.

A. Removal of the substation foundations to a depth of two (2) feet below grade will require various forms of



hydraulic equipment and various dozers and loaders. Estimated foundation rubble volume is based on the foundation dimensions of these facilities.

Estimated foundation rubble volume:	255 cubic yards
Estimated labor & equipment costs: \$	100.00 /cubic yard
Total estimate for substation foundation removal:	\$ 25,500.00

B. We have assumed that the concrete rubble generated from the foundations (while separating rebar as necessary) will not be transported offsite but be used onsite as fill at toes of slopes, for road base or topping material, or at other locations in need of fill as desired by the property owner. In the unlikely event the material cannot be used on-site, the material will be transported for offsite use. Costs to transport the foundation rubble to disposal are based on 255 cubic yards of rubble, and 10 cubic yards per dump truck trip.

Estimated labor & equipment costs:	\$	400.00	/dump	truck trip	
Total estimate for substation foundation	on transportation:		\$	10,400.00	
Total for removal and transportation/disp	osal of substation fou	ndations:			\$ 35,900.00

#### 6.4 Re-grading of substation site:

A. For the restoration of the substation site, we are assuming that all excavated areas will be brought up to grade and sloped to drain with suitable fill material generated from the re-grading of the site or from off-site sources. The estimated cost includes additional fill, topsoil or other organic matter to support growth, seed, and mulch.

Approximate disturbed area:		120,000 SF/Sub	station Site
Estimated cost per 1000 SF (1 MSF):	\$	330.00 /MSF	
Total estimated re-grading material cost	for substation:	\$	39,600.00

B. This re-grading and restoration work is estimated to take a dozer and operator approximately seven (7) days to complete.

Labor & equipment rate:	\$	200.00 /hour		
Total re-grading and restoration work for	substation:	\$	11,200.00	
Total estimate for re-grading substation site i	s:			\$ 50,800.00
Total opinion of probable costs for Electrical S	ubstation remo	val:		\$ 268,700.00

#### 7. Electrical GenLead System

7.1 Disassembly of overhead GenLead lines and associated components:

A. Disassembly and spooling costs for the overhead GenLead lines and associated components are based on the assumption that the labor effort required will be a 3-man crew working for four (4) hours per 1,000 feet of overhead wire.

	Estimated total length of overhead lines:		90,820	feet		
	Estimated labor rate:	\$	35.00	/man-h	our	
	Total estimate for overhead GenLead disas	sembly:		\$	38,700.00	
B.	Equipment rates are estimated at the follow	ving rate fo	r approximately	v 46 days		
	Estimated equipment rates:	\$	1,700.00	/day		
	Total estimate for overhead GenLead disas	sembly equ	ipment:	\$	78,200.00	
C.	Pole removal and filling of remaining hole,	based on t	he following ap	proxima	te quantities:	
	Amount of poles:		285	each		
	Removal labor and equipment costs:	\$	160.00	/pole		
	Total estimate for overhead GenLead pole	removal:		\$	45,600.00	
Τo	tal for disassembly of overhead GenLead lin	nes:				\$ 162,500.00



#### 7.2 Transportation of GenLead lines and associated components

A. The cost to transport the GenLead lines and associated components to facilities for scrap, recycling or disposal is based on the number of spools required per GenLead line sizes and lengths for the project, and a capacity of eight (8) spools per truck.

Estimated spools of GenLead line: Estimated labor & equipment cost: \$		1,400.00	z trio	
Estimated labor & equipment cost.	φ	1,400.00	/ uuur	сшр
Total estimate for GenLead lines disassembly:			\$	28,000.00

B. Pole removal will be transported at a rate of 30 poles per logging truck. It is assumed that poles will be sold or given away. 285 each Amount of poles:

Total opinion of probable costs for Electrical Ger	Lead Syste	em removal:			\$	201,500.00
Total for transportation of GenLead line and as	ssociated co	mponents:			\$	39,000.00
Total estimate for overhead GenLead pole	removal:		\$	11,000.00	_	
Estimated labor & equipment costs:	\$	1,100.00	/truck	, trip		

# 8. Dynamic Reactive Device Facility

# 8.1 Building removal

Demolition of the 12,000 square foot building, including labor, equipment, and transportation to facilities for scrap, recycling, or disposal is based on a removal rate of 20,100 cubic feet per day over 18 days at a daily cost of \$7,600:

\$136,800.00

- 8.2 Disassembly of exterior associated components.
  - A. Disassembly costs for the exterior associated components is based on the assumption that the labor effort required will be a 5-man crew working for seven (7) days.

Estimated labor rate:	\$	35.00	/man	-hour
Total estimate for exterior component of	disassembly:		\$	9,800.00

B. The disassembly will require a variety of construction equipment; it is difficult to estimate specific equipment requirements. In lieu of specific equipment rates, our opinion of probable cost includes a weekly rental equipment allowance for the assumed seven (7) days.

Estimated equipment rental rate: \$		33,000.00	/week		
Total estimate for equipment rental:			\$	46,200.00	
otal for disassembly of exterior associated compone	ents:				\$ 56,000.00

Total for disassembly of exterior associated components:

#### 8.3 Removal and transportation/disposal of Facility foundations.

A. Removal of the Facility building and associated components foundations to a depth of two (2) feet below grade will require various forms of hydraulic equipment and various dozers and loaders. Estimated foundation rubble volume is based on the approximated foundation dimensions of these facilities.

Estimated foundation rubble volume:	nated foundation rubble volume: 860 cubic yards			
Estimated labor & equipment costs:	\$	100.00 /cubic yard		
Total estimate for Facility foundation removal:		\$	86,000.00	

B. We have assumed that the concrete rubble generated from the foundations (while separating rebar as necessary) will not be transported offsite but be used onsite as fill at toes of slopes, for road base or topping material, or at other locations in need of fill as desired by the property owner. In the unlikely event the material cannot be used on-site, the material will be transported for offsite use. Costs to transport the foundation rubble to disposal are based on 10 cubic yards per dump truck trip.

Estimated foundation rubble volume:	860 cubic yards		
Estimated labor & equipment costs:	\$	400.00 /dump truck trip	



	\$	34,400.00		
n:			\$	120,400.00
			· ·	
0,000	SF			
0.00	/MSF			
	\$	16,500.00	-	
r and	operator	approximate	ely thr	ee (3) days t
0.00	/hour			
0.00	/hour \$	4,800.00	-	
	excava st incl 0,000 0.00	excavated areas st includes add 0,000 SF 0.00 /MSF \$	excavated areas will be brow st includes additional fill, t 0,000 SF 0.00 /MSF \$ 16,500.00	xcavated areas will be brought up st includes additional fill, topsoil 0,000 SF 0.00 /MSF

# 9. Operation & Maintenance Building

9.1 Building removal

Demolition of an approx. 5,916 square foot building, including labor, equipment, and transportation to facilities for scrap, recycling, or disposal is based on a removal rate of 20,100 cubic feet per day over 6 days at a daily cost of \$7,600:

\$45,600.00

# 9.2 Removal and transportation/disposal of building foundations.

A. Removal of the O&M building and associated components foundations to a depth of two (2) feet below grade will require various forms of hydraulic equipment and various dozers and loaders. Estimated foundation rubble volume is based on the approximated foundation dimensions of this facility.

Estimated foundation rubble volume:		150 cubic y	ards	
Estimated labor & equipment costs:	\$	100.00 /cubic yard		
Total estimate for Facility foundation remov	val:	\$	15,000.00	

B. We have assumed that the concrete rubble generated from the foundations (while separating rebar as necessary) will not be transported offsite but be used onsite as fill at toes of slopes, for road base or topping material, or at other locations in need of fill as desired by the property owner. In the unlikely event the material cannot be used on-site, the material will be transported for offsite use. Costs to transport the foundation rubble to disposal are based on 10 cubic yards per dump truck trip.

Estimated foundation rubble volume:		150	cubic	yards	
Estimated labor & equipment costs:	\$	400.00	/dumj	p truck trip	
Total estimate for Facility foundation transp	portation:		\$	6,000.00	
Total for removal and transportation/disposal	of Facility fou	ndation:			\$ 21,000.00

#### 9.3 Re-grading of Facility site:

A. For the restoration of the Facility site, we are assuming that all excavated areas will be brought up to grade and sloped to drain with suitable fill material. The estimated cost includes additional fill, topsoil or other organic matter to support growth, seed, and mulch.

Approximate disturbed area:			
Estimated cost per 1000 SF (1 MSF):	\$	330.00 /MSF	



Total estimated re-grading cost for Facility Building:	5	6,000.00
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B. This re-grading and restoration work is estimated to take a dozer and operator approximately one (1) day to complete.

Labor & equipment rate:	\$	200.00	/hour			
Total re-grading and restoration work fo	or Facility building:		\$	1,600.00	-	
Total estimate for re-grading Facility site is:					\$	7,600.00
Total opinion of probable costs for <b>Operation</b> a	& Maintenance E	Building r	emoval:		\$	74,200.00

#### Scrap / Salvage Value

For the purposes of this decommissioning plan, we have assumed that transformers would be sold for reuse and all other scrapable metal materials from the project decommissioning would be sold as scrap to a recycling yard in the Bangor, Maine area. The presumed scrap / salvage values are based on the following conservative estimates:

1. Presumed scrap value of WTGs. In estimating the scrap value of the WTGs, the following component weight estimates were used (all weights are in pounds). No scrap value was assumed for the blades or nacelle shell.

					1		
	Base:		Nacelle			152,772	
	Lower Mid:	107,730	Rotor			76,235	
	Upper Mid:	137,545					
	Top:	98,502					
	Total estimated weight for eac	h WTG:		697,101	lbs		
	Price for #1 steel scrap at a Bangor, N	Maine area					
	metal recycling center:		#1 steel		\$	230.00 /to	on
	[(697,101 lbs / 2,000 lbs per ton) :	x \$230 per top x	62 turbine	r = approx		,	
	[(0)7,101 ibs / 2,000 ibs per ton)	x \$250 per ton x	02 turbin	.s – appiox.	ф <b>т,</b> У70,т00	I	
	Tetel inite for an end - end		TC			\$	4,970,400.00
	Total opinion of presumed scrap val	ue for all 02 w	I GS:			φ	4,970,400.00
2.	2. Presumed value of the external transformers. Based on our research, typical transformers have a life expectan of 50 years. Therefore, at 20 years a transformer could have a value of approximately 50% of its original cost. However, to be conservative, we have estimated the value of the external transformers at 10% of the original transformer cost.:						
	Estimated original cost for external tra	insfomers:	\$	70,000.00	each		
	Estimated value (10%):		\$	7,000.00	each		
	~ /			<i>,</i>			
	Total opinion of presumed value for	all 62 external	transform	iers:		\$	434,000.00
3.	Presumed scrap value of the MET component weight and steel scrap value		nating the	scrap value	of the MET	' towers, the f	ollowing
	MET tower component weight:			6,000	lbs		
	Steel scrap value:		\$	230.00	/ton		
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Total opinion of presumed scrap value of all five (5) MET towers: \$ 3,500.00

4. Overhead Collector wiring scrap value. Quantities of overhead wire and wire sizes and lengths are based on electrical drawings prepared by SGC and used as a basis for estimated scrappable metal amounts. Overhead wiring consists of aluminum (steel reinforced) conductors.



	Estimated linear feet of wiring: Estimated weight of scrappable aluminum:		281,685 246,155				
	Price for aluminum scrap at a Bangor area metal recycling center:	\$	500.00	/ton			
	Total opinion of presumed scrap value of the over	nead c	ollector wiring:			\$	61,600.00
5.	<b>Presumed scrap value of Substation</b> . Based on our of 50 years. Therefore, at 20 years the substation coul However, to be very conservative, we have estimated	d have	a value of appro	ximately 5	0% of its ori	ginal	cost.
	Original substation construction estimate, less the transformer:	\$	8,500,000.00				
	Estimated substation scrap value (2%):	\$	170,000.00				
	Total opinion of presumed scrap value of the subs	tation	:			\$	170,000.00
6.	<b>Presumed value of Substation Transformer(s).</b> Be of 50 years. Therefore, at 20 years a transformer could However, to be conservative, we have estimated the vertransformer cost:	l have	a value of approx	ximately 50	)% of its orig	ginal	cost.
	Original substation transformer construction cost: Estimated value (10%):	\$ \$	2,500,000.00 250,000.00				
	Total opinion of presumed value of the substation	transf	former(s):			\$	250,000.00
7.	Overhead GenLead wiring scrap value. Quantities electrical drawings prepared by SGC and used as a bac consists of aluminum (steel reinforced) conductors.						
	Estimated linear feet of wiring:		272,460	ft			
	Estimated weight of scrappable aluminum:		297,799	lbs			
	Price for aluminum scrap at a Bangor area metal						
	recycling center:	\$	500.00	/ton			
	Total opinion of presumed scrap value of the over	nead C	GenLead wiring	:		\$	74,500.00
So	rap / Salvage Value Summary						

The total opinion of probable scrap / salvage value from summing the items above: \$ 5,964,000.00



# **Decommissioning Summary**

The total opinion of probable disassembly and removal costs is: The total opinion of probable scrap / salvage value for the project is:	\$ \$	7,686,410.00 5,964,000.00	
The net estimated opinion of probable <u>cost</u> for decommissioning is:			\$ 1,722,410.00

Please do not hesitate to contact us with any questions regarding the information contained in this report. We appreciate the opportunity to work with you on this project.

Sincerely, James W. Sewall Company

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