

## **APPENDIX B CAPITAL COST ESTIMATES**

<b>AESO Project Name &amp; No.</b>	<b>Windrise Wind Power Project Connection</b>		<b>P2041</b>	<b>Radial 138 kV Connection to Windy Flats 138S Substation (Proposed Transmission Development)</b>
<b>Prepared by:</b>	<b>CPL/CF Power/TransAlta</b>			
<b>AACE Class:</b>	<b>N/A</b>	<b>Estimate Basis</b>	<b>NID</b>	
<b>High Range</b>	<b>50%</b>	<b>Low Range</b>	<b>-30%</b>	
<b>Date of Estimate:</b>	<b>03/20/2019</b>	<b>Base Year \$</b>	<b>2019</b>	
<b>In Service Date</b>	<b>11/02/2020</b>	<b>In Service Year \$</b>	<b>2020</b>	
	<b>SYSTEM</b>	<b>PARTICIPANT</b>	<b>TOTAL</b>	<b>ASSUMPTIONS</b>
<b>TRANSMISSION LINE</b>				
Material	\$ -			
Labour	\$ -			
Supply & Install	\$ -			
<b>TOTAL TRANSMISSION LINE</b>	<b>\$ -</b>			
<b>SUBSTATION</b>				
Material	\$ -			
Labour	\$ -			
Supply & Install	\$ -			
<b>TOTAL SUBSTATION</b>	<b>\$ -</b>			
<b>TELECOMMUNICATION</b>				
Material	\$ -			
Labour	\$ -			
Supply & Install	\$ -			
<b>TOTAL TELECOMMUNICATIONS</b>	<b>\$ -</b>			
<b>OWNERS</b>				
Pre-SP Cost	\$ -			
Service Proposal	\$ -			
Facility Applications	\$ -			
Regulatory & Compliance	\$ -			
Land Rights - Easements	\$ -			
Land - Damage Claims	\$ -			
Land - Acquisitions	\$ -			
Land - Other	\$ -			
<b>TOTAL OWNERS COST</b>	<b>\$ -</b>			
<b>DISTRIBUTED</b>				
Procurement Management	\$ -			
Project Management	\$ -			
Construction Management	\$ -			
Contingency	\$ -			
Escalation	\$ -			
<b>TOTAL DISTRIBUTED</b>	<b>\$ -</b>			
<b>SALVAGE</b>				
Transmission Line Labour	\$ -			
Substation Labour	\$ -			
Telecom Labour	\$ -			
Land Remediation and Reclamation	\$ -			
<b>TOTAL SALVAGE</b>	<b>\$ -</b>			
<b>OTHER COSTS</b>				
AFUDC				Allowance for Funds Used During Construction (AFUDC)
E&S				Preliminary Engineering+Detailed Design+Geotechnical Engineering+Electrical Engineering
<b>TOTAL OTHER</b>	<b>\$ -</b>			
<b>TOTAL PROJECT</b>	<b>\$ -</b>			

<b>AESO Project Name &amp; No.</b>	<b>Windrise Wind Power Project Connection</b>		<b>P2041</b>	<b>Radial 240 kV Connection to Windy Flats 138S substation</b>
<b>Prepared by:</b>	<b>CPL/CF Power/TransAlta</b>			
<b>AACE Class:</b>	<b>N/A</b>	<b>Estimate Basis</b>	<b>NID</b>	
<b>High Range</b>	<b>50%</b>	<b>Low Range</b>	<b>-30%</b>	
<b>Date of Estimate:</b>	<b>03/20/2019</b>	<b>Base Year \$</b>	<b>2019</b>	
<b>In Service Date</b>	<b>11/02/2020</b>	<b>In Service Year \$</b>	<b>2020</b>	
	<b>SYSTEM</b>	<b>PARTICIPANT</b>	<b>TOTAL</b>	<b>ASSUMPTIONS</b>
<b>TRANSMISSION LINE</b>				
Material	\$ -			
Labour	\$ -			
Supply & Install	\$ -			
<b>TOTAL TRANSMISSION LINE</b>	<b>\$ -</b>			
<b>SUBSTATION</b>				
Material	\$ -			
Labour	\$ -			
Supply & Install	\$ -			
<b>TOTAL SUBSTATION</b>	<b>\$ -</b>			
<b>TELECOMMUNICATION</b>				
Material	\$ -			
Labour	\$ -			
Supply & Install	\$ -			
<b>TOTAL TELECOMMUNICATIONS</b>	<b>\$ -</b>			
<b>OWNERS</b>				
Pre-SP Cost	\$ -			
Service Proposal	\$ -			
Facility Applications	\$ -			
Regulatory & Compliance	\$ -			
Land Rights - Easements	\$ -			
Land - Damage Claims	\$ -			
Land - Acquisitions	\$ -			
Land - Other	\$ -			
<b>TOTAL OWNERS COST</b>	<b>\$ -</b>			
<b>DISTRIBUTED</b>				
Procurement Management	\$ -			
Project Management	\$ -			
Construction Management	\$ -			
Contingency	\$ -			
Escalation	\$ -			
<b>TOTAL DISTRIBUTED</b>	<b>\$ -</b>			
<b>SALVAGE</b>				
Transmission Line Labour	\$ -			
Substation Labour	\$ -			
Telecom Labour	\$ -			
Land Remediation and Reclamation	\$ -			
<b>TOTAL SALVAGE</b>	<b>\$ -</b>			
<b>OTHER COSTS</b>				
AFUDC				Allowance for Funds Used During Construction (AFUDC)
E&S				Preliminary Engineering+Detailed Design+Geotechnical Engineering+Electrical Engineering
<b>TOTAL OTHER</b>	<b>\$ -</b>			
<b>TOTAL PROJECT</b>	<b>\$ -</b>			

<b>AESO Project Name &amp; No.</b>	<b>Windrise Wind Power Project Connection</b>	<b>P2041</b>	<b>Radial 138 kV Connection to Peigan 59S substation</b>	
<b>Prepared by:</b>	<b>CPL/CF Power/TransAlta</b>			
<b>AACE Class:</b>	<b>N/A</b>	<b>Estimate Basis</b>		<b>NID</b>
<b>High Range</b>	<b>50%</b>	<b>Low Range</b>		<b>-30%</b>
<b>Date of Estimate:</b>	<b>03/20/2019</b>	<b>Base Year \$</b>		<b>2019</b>
<b>In Service Date</b>	<b>11/02/2020</b>	<b>In Service Year \$</b>		<b>2020</b>
	<b>SYSTEM</b>	<b>PARTICIPANT</b>	<b>TOTAL</b>	<b>ASSUMPTIONS</b>
<b>TRANSMISSION LINE</b>				
Material	\$ -			
Labour	\$ -			
Supply & Install	\$ -			
<b>TOTAL TRANSMISSION LINE</b>	<b>\$ -</b>			
<b>SUBSTATION</b>				
Material	\$ -			
Labour	\$ -			
Supply & Install	\$ -			
<b>TOTAL SUBSTATION</b>	<b>\$ -</b>			
<b>TELECOMMUNICATION</b>				
Material	\$ -			
Labour	\$ -			
Supply & Install	\$ -			
<b>TOTAL TELECOMMUNICATIONS</b>	<b>\$ -</b>			
<b>OWNERS</b>				
Pre-SP Cost	\$ -			
Service Proposal	\$ -			
Facility Applications	\$ -			
Regulatory & Compliance	\$ -			
Land Rights - Easements	\$ -			
Land - Damage Claims	\$ -			
Land - Acquisitions	\$ -			
Land - Other	\$ -			
<b>TOTAL OWNERS COST</b>	<b>\$ -</b>			
<b>DISTRIBUTED</b>				
Procurement Management	\$ -			
Project Management	\$ -			
Construction Management	\$ -			
Contingency	\$ -			
Escalation	\$ -			
<b>TOTAL DISTRIBUTED</b>	<b>\$ -</b>			
<b>SALVAGE</b>				
Transmission Line Labour	\$ -			
Substation Labour	\$ -			
Telecom Labour	\$ -			
Land Remediation and Reclamation	\$ -			
<b>TOTAL SALVAGE</b>	<b>\$ -</b>			
<b>OTHER COSTS</b>				
AFUDC				Allowance for Fonds Used During Construction (AFUDC)
E&S				Preliminary Engineering+Detailed Design+Geotechnical Engineering+Electrical Engineering
<b>TOTAL OTHER</b>	<b>\$ -</b>			
<b>TOTAL PROJECT</b>	<b>\$ -</b>			

<b>AESO Project Name &amp; No.</b>	<b>Windrise Wind Power Project Connection</b>	<b>P2041</b>	<b>Radial 240 kV Connection to Peigan 59S substation</b>	
<b>Prepared by:</b>	<b>CPL/CF Power/TransAlta</b>			
<b>AACE Class:</b>	<b>N/A</b>	<b>Estimate Basis</b>		<b>NID</b>
<b>High Range</b>	<b>50%</b>	<b>Low Range</b>		<b>-30%</b>
<b>Date of Estimate:</b>	<b>03/20/2019</b>	<b>Base Year \$</b>		<b>2019</b>
<b>In Service Date</b>	<b>11/02/2020</b>	<b>In Service Year \$</b>		<b>2020</b>
	<b>SYSTEM</b>	<b>PARTICIPANT</b>	<b>TOTAL</b>	<b>ASSUMPTIONS</b>
<b>TRANSMISSION LINE</b>				
Material	\$ -			
Labour	\$ -			
Supply & Install	\$ -			
<b>TOTAL TRANSMISSION LINE</b>	<b>\$ -</b>			
<b>SUBSTATION</b>				
Material	\$ -			
Labour	\$ -			
Supply & Install	\$ -			
<b>TOTAL SUBSTATION</b>	<b>\$ -</b>			
<b>TELECOMMUNICATION</b>				
Material	\$ -			
Labour	\$ -			
Supply & Install	\$ -			
<b>TOTAL TELECOMMUNICATIONS</b>	<b>\$ -</b>			
<b>OWNERS</b>				
Pre-SP Cost	\$ -			
Service Proposal	\$ -			
Facility Applications	\$ -			
Regulatory & Compliance	\$ -			
Land Rights - Easements	\$ -			
Land - Damage Claims	\$ -			
Land - Acquisitions	\$ -			
Land - Other	\$ -			
<b>TOTAL OWNERS COST</b>	<b>\$ -</b>			
<b>DISTRIBUTED</b>				
Procurement Management	\$ -			
Project Management	\$ -			
Construction Management	\$ -			
Contingency	\$ -			
Escalation	\$ -			
<b>TOTAL DISTRIBUTED</b>	<b>\$ -</b>			
<b>SALVAGE</b>				
Transmission Line Labour	\$ -			
Substation Labour	\$ -			
Telecom Labour	\$ -			
Land Remediation and Reclamation	\$ -			
<b>TOTAL SALVAGE</b>	<b>\$ -</b>			
<b>OTHER COSTS</b>				
AFUDC				Allowance for Funds Used During Construction (AFUDC)
E&S				Preliminary Engineering+Detailed Design+Geotechnical Engineering+Electrical Engineering
<b>TOTAL OTHER</b>	<b>\$ -</b>			
<b>TOTAL PROJECT</b>	<b>\$ -</b>			