



# Documents and Timelines for LDC Based Projects

Hydro One Networks Inc.

October 31, 2014 | Revision 2.1

**Project Size: less than or equal to 250 kW**  
**Hydro One owned / shared feeders w/ downstream embedded LDC**

**Engineering and Project Management Assignment**

<b>Scope / Requirements</b>		<b>Requirements from the LDC</b>
<b>Feeder Protection Setting Review</b>		Hydro One Protection Settings Review - 6 weeks before ISD
<b>SCADA Monitoring for DG Site</b>		N/A
<b>Transfer Trip</b>		N/A
<b>Letter of Equivalency (LoE)</b>	<b>Draft</b>	4 weeks before ISD
	<b>Final</b>	Ten (10) business days after ISD
<b>Teleprotection Verification Report (TVR) w/ SLD</b>	<b>Draft</b>	N/A
	<b>Final</b>	N/A
<b>SLD &amp; Protection Description Matrix</b>		8 weeks before ISD
<b>Cost Connection Agreement</b>		CCA

**Project Size: Less than or equal to 500 kW**  
**LDC owned / Express Feeder**

**No Engineering and Project Management Assignment**

Scope / Requirements		Requirements from the LDC
<b>Feeder Protection Setting Review</b> (required on Express if Hydro One owns Protection settings)		<ul style="list-style-type: none"> <li>Setting Reviewed during LDC CIA</li> <li><b>If changes required</b> - An approved copy of proposed setting changes submitted to Hydro One P&amp;C Technical Services for review - 6 weeks before ISD</li> </ul>
<b>SCADA Monitoring for DG Site</b>		N/A
<b>Transfer Trip for DG Site</b>		N/A
<b>Letter of Equivalency (LoE)</b>	<b>Draft</b>	4 weeks before ISD
	<b>Final</b>	10 days after ISD
<b>Teleprotection Verification Report (TVR) w/ SLD</b>	<b>Draft</b>	N/A
	<b>Final</b>	N/A
<b>SLD &amp; Protection Description Matrix</b>		8 weeks before ISD
<b>Cost Connection Agreement</b>		If <b>protections</b> on <b>express</b> feeder <b>owned by LDC</b> – CCRA (Tx) / CCA (Dx)

## Project Size: from 251kW to 500 kW

## Hydro One owned /shared feeders w/ downstream embedded LDC

## Engineering and Project Management Assignment

Scope / Requirements		Requirements from the LDC
Feeder Protection Setting Review		<ul style="list-style-type: none"> <li>Hydro One Protection Settings Review - 6 weeks before ISD</li> </ul>
SCADA Monitoring		<ul style="list-style-type: none"> <li>Monitoring Required</li> <li>NMS update needs to be done six (6) Weeks before ISD.</li> <li>Complete communication link and SCADA point testing 2 weeks before ISD</li> </ul>
Transfer Trip (Determined in CIA)		<ul style="list-style-type: none"> <li><b>Transfer Trip</b> or <b>Anti Islanding Schemes</b> required.</li> <li>If Transfer Trip:               <ul style="list-style-type: none"> <li>Dead Zone Transfer Trip testing – 2 weeks before ISD</li> <li>Live Zone Transfer Trip Test – within 1 week of ISD</li> </ul> </li> </ul>
Letter of Equivalency (LoE)	Draft	4 weeks before ISD
	Final	10 days after ISD
Teleprotection Verification Report (TVR) w/ SLD	Draft	4 weeks before ISD
	Final	10 days after ISD
SLD & Protection Description Matrix		8 weeks before ISD
Connection Agreement		CCA

**Project Size: 501kW to 1MW**

**Fully Owned LDC feeder / Express Feeders (serving only that LDC)**



**Engineering and Project Management Assignment**

<b>Scope / Requirements</b>		<b>Requirements from the LDC</b>
<b>Feeder Protection Setting Review</b> (required on Express if Hydro One owns Protection settings)		<ul style="list-style-type: none"><li>Setting Reviewed during LDC CIA</li><li><b>If changes required</b> - An approved copy of proposed setting changes submitted to Hydro One P&amp;C Technical Services for review - 6 weeks before ISD</li><li>Directioning determined LDC</li></ul>
<b>SCADA Monitoring</b>		<ul style="list-style-type: none"><li>Monitoring Required</li><li>NMS Update needs - 6 Weeks before ISD.</li><li>Communication link/SCADA point testing - 2 Weeks before ISD</li></ul>
<b>Transfer Trip (Determined by LDC)</b>		<ul style="list-style-type: none"><li><b>Transfer Trip</b> or <b>Anti Islanding Schemes</b> required.</li><li>If Transfer Trip:<ul style="list-style-type: none"><li>Dead Zone Transfer Trip testing - 2 weeks before ISD</li><li>Live Zone Transfer Trip Test – within 1 week of ISD</li></ul></li></ul>
<b>Letter of Equivalency (LoE)</b>	<b>Draft</b>	4 weeks before ISD
	<b>Final</b>	10 days after ISD
<b>Teleprotection Verification Report (TVR) w/ SLD</b>	<b>Draft</b>	4 weeks before ISD (Section 3A)
	<b>Final</b>	10 days after ISD
<b>SLD &amp; Protection Description Matrix</b>		8 weeks before ISD
<b>Cost Connection Agreement</b>		CCRA (Tx) / CCA (Dx)

# Project Size: 501kW to 1MW

## Hydro One owned /shared Feeders w/ downstream embedded LDC

### Engineering and Project Management Assignment

Scope / Requirements		Requirements from the LDC
Feeder Protection Setting Review		Hydro One Protection Settings Review Required – 6 weeks before
		Directioning will be determined <b>Cases by Case Basis</b> (If Required) 6) weeks before ISD
SCADA Monitoring		<ul style="list-style-type: none"> <li>Monitoring Required</li> <li>NMS Updates - 6) weeks before ISD.</li> <li>Communication link &amp; SCADA point testing - 2 weeks before ISD</li> </ul>
Transfer Trip		<ul style="list-style-type: none"> <li><b>Transfer Trip</b> or <b>Anti Islanding Schemes</b> required.</li> <li>If Transfer Trip:               <ul style="list-style-type: none"> <li>Dead Zone Transfer Trip testing - 2 weeks before ISD</li> <li>Live Zone Transfer Trip Test – within 1 week of ISD</li> </ul> </li> </ul>
Letter of Equivalency (LoE)	Draft	4 weeks before ISD
	Final	10 days after ISD
Teleprotection Verification Report (TVR) w/ SLD	Draft	4 weeks before ISD (Section 3A)
	Final	10 days after ISD
SLD & Protection Description Matrix		8 weeks before ISD
Cost Connection Agreement		CCA

## Project Size: Greater than 1 MW

## Fully Owned LDC feeder / Express Feeders (serving only that LDC)

### Engineering and Project Management Assignment

Scope / Requirements		Requirements from the LDC
<b>Feeder Protection Setting Review</b> (required on Express if Hydro One owns Protection settings)		<ul style="list-style-type: none"> <li>Setting Reviewed during LDC CIA</li> <li><b>If changes required</b> - An approved copy of proposed setting changes submitted to Hydro One P&amp;C Technical Services for review - 6 weeks before ISD</li> </ul>
<b>SCADA Monitoring</b>		<ul style="list-style-type: none"> <li>Monitoring Required</li> <li>NMS Update – 6 Weeks before ISD.</li> <li>Communication link &amp; SCADA point testing - 2 Weeks before ISD)</li> </ul>
<b>Transfer Trip</b>		<ul style="list-style-type: none"> <li><b>Transfer Trip</b> or <b>Anti Islanding Schemes</b> required.</li> <li>If Transfer Trip:               <ul style="list-style-type: none"> <li>Dead Zone Transfer Trip testing - 2 weeks before ISD</li> <li>Live Zone Transfer Trip Test – within 1 week of ISD</li> </ul> </li> </ul>
<b>Letter of Equivalency (LoE)</b>	Draft	4 weeks before ISD
	Final	10 days after ISD
<b>Teleprotection Verification Report (TVR) w/ SLD</b>	Draft	4 weeks before ISD (Section 3A)
	Final	10 days after ISD
<b>SLD and Protection Description</b>		8 weeks before ISD
<b>Cost Connection Agreement</b>		CCRA (Tx) / CCA (Dx)

# Project Size: Greater than 1 MW

## Hydro One owned/shared Feeders w/ downstream embedded LDC

### Engineering and Project Management Assignment

Scope / Requirements		Requirements from the LDC
Feeder Protection Setting Review		Hydro One Protection Settings Review <ul style="list-style-type: none"> <li>• Required</li> </ul>
		Directioning will be determined: <ul style="list-style-type: none"> <li>• <b>Cases-by-case basis</b></li> <li>• (If Required – 6 weeks before ISD)</li> </ul>
SCADA Monitoring		<ul style="list-style-type: none"> <li>• Monitoring Required</li> <li>• NMS Update - six (6) weeks before ISD.</li> <li>• Complete communication link and SCADA point testing -</li> <li>• 2 weeks before ISD</li> </ul>
Transfer Trip		<ul style="list-style-type: none"> <li>• <b>Transfer Trip</b> or <b>Anti Islanding Schemes</b> required.</li> <li>• If Transfer Trip:               <ul style="list-style-type: none"> <li>• Dead Zone Transfer Trip testing - 2 weeks before ISD</li> <li>• Live Zone Transfer Trip Test – within 1 week of ISD</li> </ul> </li> </ul>
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Teleprotection Verification Report (TVR) w/ SLD	Draft	4 weeks before ISD (Section 3A)
	Final	10 days after ISD
SLD & Protection Description		8 weeks before ISD
Cost Connection Agreement		CCA (Dx)