

# Documents and Timelines for LDC Based Projects

Hydro One Networks Inc.



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

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



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

| Scope / Requirements   |       | Requirements from the LDC   |  |
|--|-------|---|--|
| Feeder Protection Setting Review (required on Express if Hydro One owns Protection settings) |       | <ul> <li>Setting Reviewed during LDC CIA</li> <li>If changes required - 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   |  |
| Transfer Trip for DG Site  |       | N/A   |  |
| Letter of Equivalency (LoE)  | Draft | 4 weeks before ISD  |  |
|  | Final | 10 days after ISD   |  |
| Teleprotection Verification Report (TVR) w/ SLD  | Draft | N/A   |  |
|  | Final | N/A   |  |
| SLD & Protection Description Matrix  |       | 8 weeks before ISD  |  |
| Cost Connection Agreement  |       | 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     |       | Hydro One Protection Settings Review - 6 weeks before ISD   |  |  |
| SCADA Monitoring                     |       | <ul> <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<br>(Determined in CIA) |       | <ul> <li>Transfer Trip or Anti Islanding Schemes required.</li> <li>If Transfer Trip:         <ul> <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                | Draft | 4 weeks before ISD  |  |  |
| (LoE)                                | Final | 10 days after ISD   |  |  |
| Teleprotection                       | Draft | 4 weeks before ISD  |  |  |
| Verification Report<br>(TVR) w/ SLD  | 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)

| Scope / Requirements   |       | Requirements from the LDC  |  |
|--|-------|--|--|
| Feeder Protection Setting Review (required on Express if Hydro One owns Protection settings) |       | <ul> <li>Setting Reviewed during LDC CIA</li> <li>If changes required - 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> |  |
| SCADA Monitoring   |       | <ul> <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>   |  |
| Transfer Trip<br>(Determined by LDC)   |       | <ul> <li>Transfer Trip or Anti Islanding Schemes required.</li> <li>If Transfer Trip:         <ul> <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   |  |
| <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<br>Review             |       | Hydro One Protection Settings<br>Review   | Required – 6 weeks before                             |
|   |       | Directioning will be determined   | Cases by Case Basis (If Required) 6) weeks before ISD |
| SCADA Monitoring                                |       | <ul> <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> <li>Transfer Trip or Anti Islanding Schemes required.</li> <li>If Transfer Trip:         <ul> <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  |   |
| <b>Cost Connection Agreement</b>                |       | CCA   |   |



### Project Size: Greater than 1 MW Fully Owned LDC feeder / Express Feeders (serving only that LDC)

| Scope / Requirements   |       | Requirements from the LDC   |  |
|--|-------|---|--|
| Feeder Protection Setting Review (required on Express if Hydro One owns Protection settings) |       | <ul> <li>Setting Reviewed during LDC CIA</li> <li>If changes required - An approved copy of proposed setting changes submitted to Hydro One P&amp;C Technical Services for review - 6 weeks before ISD</li> </ul>                               |  |
| SCADA Monitoring   |       | <ul> <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>   |  |
| Transfer Trip  |       | <ul> <li>Transfer Trip or Anti Islanding Schemes required.</li> <li>If Transfer Trip:         <ul> <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 Draft   |       | 4 weeks before ISD (Section 3A)   |  |
| Verification Report (TVR) w/ SLD   | Final | 10 days after ISD   |  |
| <b>SLD and Protection Description</b>  |       | 8 weeks before ISD  |  |
| Cost Connection Agreement  |       | CCRA (Tx) / CCA (Dx)  |  |

### Project Size: Greater than 1 MW Hydro One owned/shared Feeders w/ downstream embedded LDC

| Scope / Requirements                |                                       | Requirements from the LDC   |   |
|-------------------------------------|---------------------------------------|---|---|
| Feeder Protection Setting<br>Review |                                       | Hydro One Protection Settings<br>Review   | Required  |
|                                     |                                       | Directioning will be determined:  | <ul> <li>Cases-by-case basis</li> <li>(If Required – 6 weeks before ISD)</li> </ul> |
| SCADA Monitoring                    |                                       | <ul> <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> <li>Transfer Trip or Anti Islanding Schemes required.</li> <li>If Transfer Trip:         <ul> <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> |   |
|                                     | Draft                                 | 4 weeks before ISD  |   |
|                                     | Final                                 | 10 days after ISD   |   |
| Teleprotection                      | Draft 4 weeks before ISD (Section 3A) |   | A)  |
| Verification Report<br>(TVR) w/ SLD | Final                                 | 10 days after ISD   |   |
| SLD & Protection Description        |                                       | 8 weeks before ISD  |   |
| <b>Cost Connection Agreement</b>    |                                       | CCA (Dx)  |   |