

*Electricity Network Innovation Competition Full Submission*  
**Supplementary Answer Form**

**Project: REVISE**

Tick if this answer has been provided verbally: ☐

|  |  |                 |                |
|--|--|-----------------|----------------|
| Project code                           | WPD/EN/NIC/05  | Question Number | 5              |
| Question date                          | 09 August 2018   | Answer date     | 13 August 2018 |
| Submission section question relates to | Proforma Section 2   |                 |                |
| Topic                                  | (b) Provides value for money to electricity customers  |                 |                |
| Question                               | What is the expected frequency of INR switching in these? Based on your control engineers assessment of the likely impact of increased DG in these areas.  |                 |                |
| Notes on question                      | None   |                 |                |
| Answer                                 | <p>Following our power system studies and discussions with our Network Management System (NMS) operators and network design engineers, we anticipate that INR switching could occur up to several times during a day. We estimate that INR switching will most likely occur during instances when there is a sustained step change in network demand and/or DG output.</p> <p>One of the main aims of the REVISE trial will be to assess and determine the most suitable frequency of INR switching. INR will use historic and real-time information from the surrounding network to determine the optimal running arrangement. But most importantly, INR will also store and analyse this information to learn from previous network configurations and improve the optimisation process. As such, the trial will aim to monitor and assess the frequency of INR switching using these new techniques and fine-tune the switching. This will ensure that the network configuration is changing only when the benefits generated are above the calculated tolerance level.</p> |                 |                |
| Attachments                            | None   |                 |                |