



Appendix B — Transmission-Distribution Interconnections

ATC has received numerous requests from distribution companies for new T-D interconnections. These interconnections generally take on three different types of projects:

1. Constructing new T-D substations. Typically, these new interconnections involve constructing a new T-D substations adjacent to an existing transmission line and looping the transmission line into the new substation. In some instances, the new substation may not be able to be sited adjacent to the transmission line and requires that ATC construct a transmission line to the new substation site. Since this type of interconnection is a way for a distribution company to redistribute load between the two existing substations, it typically does not materially affect transmission system performance. In some instances, however, the optimum site for the new substation, from a distribution planning perspective, is such that a new transmission line from two substations that were not previously interconnected is warranted, forming a new network line, which can materially affect transmission system performance.
2. Adding T-D transformers at existing substations. These new interconnections involve expanding an existing T-D substation to accommodate a new T-D transformer. Typically, this type of interconnection is a way for a distribution company to improve reliability by providing redundancy, lower the loading on existing T-D transformers and meet increasing customer demand.
3. Replacing existing T-D transformers at existing substations. These are not technically new interconnections since no expansion is required at the existing T-D substation – it's merely a means of increasing transformer capacity. This type of project is a way to reliably serve increasing customer demand.

In some instances, the reason for a new T-D interconnection request is driven by a large new customer load, such as a new industry with a large demand for electricity. In these instances, there may be a need for other transmission system reinforcements to reliably serve the new load.

All of the T-D interconnection requests that are being implemented, designed or evaluated by ATC are shown in Figures B-1 through B-5 for Zones 1-5, respectively. A corresponding list of these interconnection requests is available on ATC's Web site, www.atcllc.com.

Figure B-2
Transmission-Distribution Interconnection Requests - Zone 2

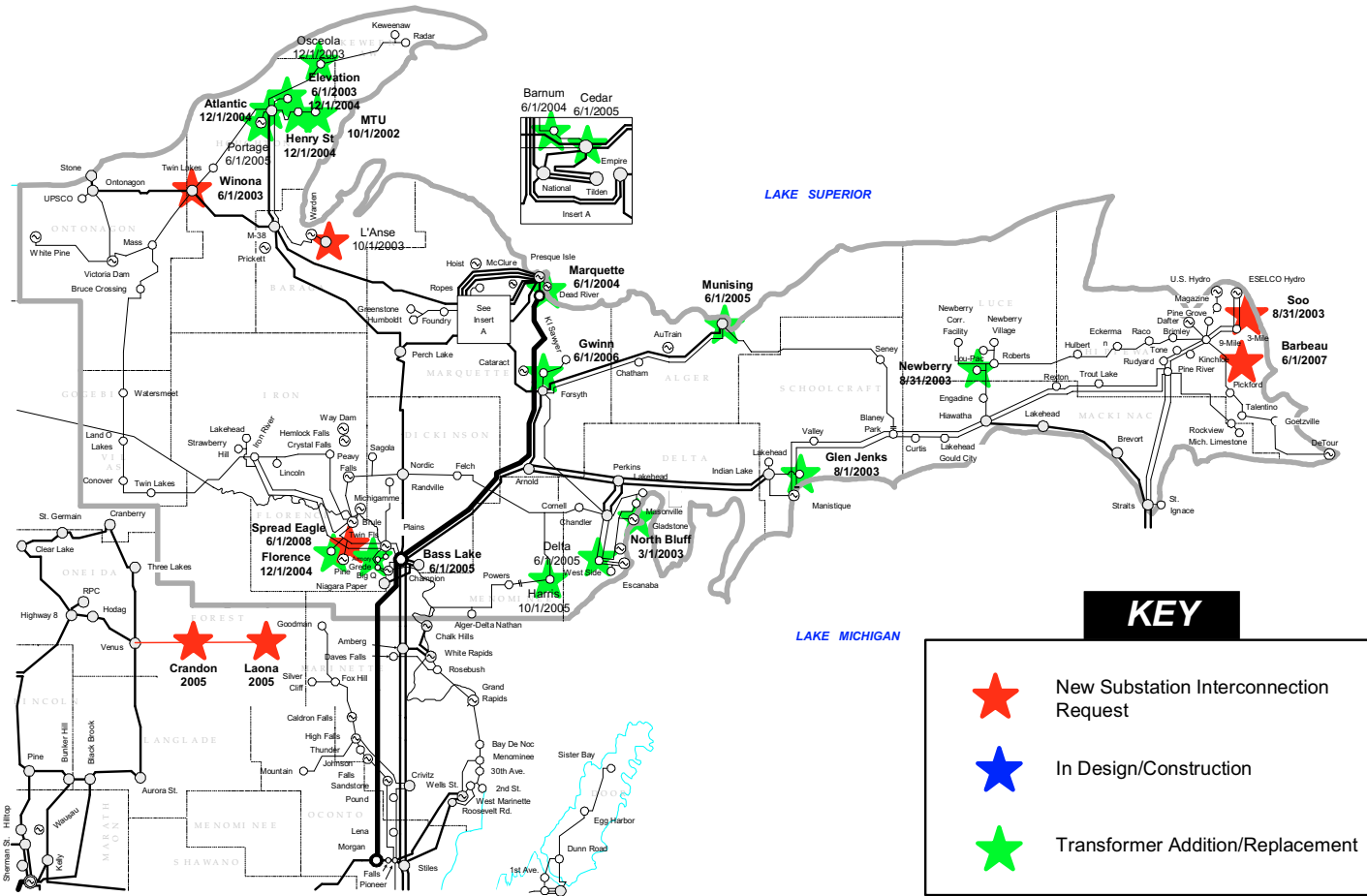
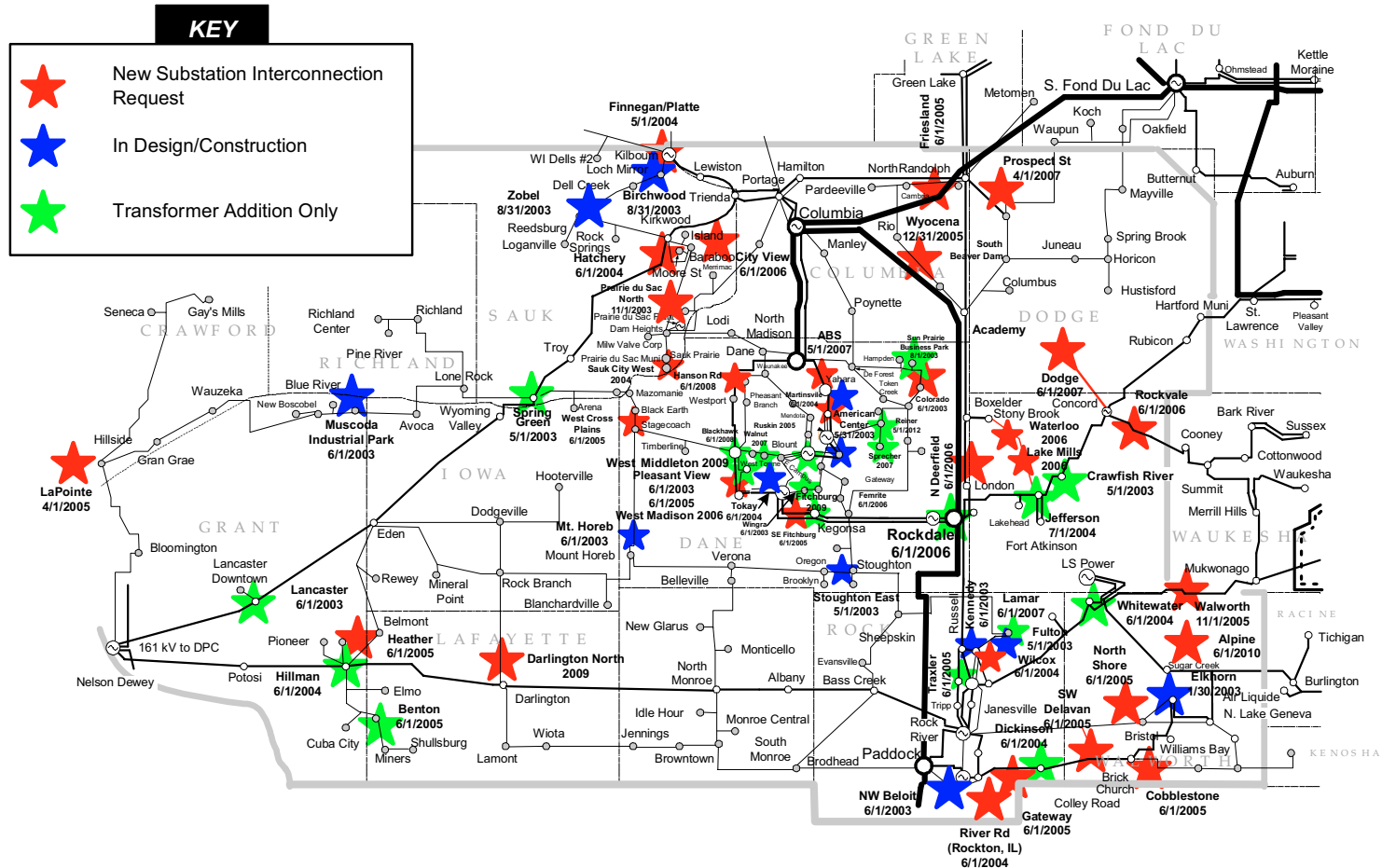


Figure B-3 Transmission-Distribution Interconnection Requests - Zone 3



**Figure B-4
Transmission-Distribution Interconnection Requests - Zone 4**

