major concern of the Commission is that the proposed standards be sufficiently unambiguous to provide consistent implementation of the standards on every RIN Node. Customers and other users of RINs should be able to use the same software to access all RIN Nodes and should be able to expect that procedures and data definitions will be the same on all Nodes. The Commission must ensure that every RIN Node would be presenting information that would be clearly understood.

i. Phase I Data Definitions for HTML Pages and File Transfers

The information model, data dictionary and various templates appearing in the How Report specify the name, definition and format of the data items to be communicated on the RIN. They are intended to be the basis for the standards specifying file uploads and downloads and HTML displays. Because of the importance of these standards to the usability and uniformity of RINs, the Commission must ensure that downloadable and uploadable files will have the same unambiguous structure, field formats, units and definitions, etc., no matter which RIN Node they come from or go to. The Commission is similarly concerned that all WWW page displays, while not necessarily having the same appearance, contain the same information and use the same definitions. etc.

Question 26. Does the How Report define HTML displays and downloadable files with sufficient clarity to permit public utilities to implement Phase I such that the downloaded files and HTML displays received by customers from each RIN have the same definitions, etc.? If not, what clarifications are needed? Similarly, are uploaded files sufficiently defined in the How Report?

With these goals in mind, the Commission has compiled a series of templates (tables) that show in one place the specifications that appear in various sections of the How Report. The templates contained in Appendix "C," are intended to help produce a consistent implementation of RIN requirements and highlight problems that could hinder consistent implementation of RIN standards.

In Appendix "C", the Commission proposes to make changes to certain definitions, data formats, and specifications appearing in the How Report. Question 27. The Commission invites comment on the issues discussed in Appendix "C".

The Commission proposes to add a price field to the templates that would specify available capacity and those templates associated with the purchase of capacity. The price field would allow primary providers to offer capacity to buyers at a discount. The price field in the available capacity templates would contain the initially offered price, whether this is the tariff price or a discount. Adding the price field to the templates for the purchase of capacity would allow buyers to offer a price for capacity below the posted price. Further discounts from any posted offered price could be negotiated. The price field in the purchase of capacity templates would permit customers to offer a price different than the offering price.

## ii. Internet Browsers

There are a large number of Internet browsers available commercially and in the public domain. The How Report proposes that browsers support "at least" HTML version 3 and "optionally" support Secure Sockets Layer. The HTML standards used by browsers change from time to time, and, in addition, various browsers can support different extensions to the standards. The Commission does not want to stifle innovation, but at the same time it does not want chaos on the RIN. The Commission does not want customers to be forced to use different browsers for different RIN Nodes. The Commission wants to ensure that a customer will be able to choose a browser and use it to access all RIN Nodes.

Question 28. The Commission requests comments on how to ensure that a customer will be able to choose a browser and use it to access all RIN Nodes.

iii. Bandwidth of Node Connections to the Internet

The How Report proposes a formula to calculate the minimum bandwidth connection between a RIN Node and the Internet using the criteria of customers receiving data at the rate of 8,000 bits per second.<sup>46</sup> This speed may be adequate for customers reading HTML pages, which are about 8,000 bits in size, but it might be too slow for customers downloading many 100,000 byte files.<sup>47</sup> Eight thousand bits per second is much slower than the 28,800 bit per second telephone connections many private individuals use to connect to the Internet. Electric utilities will likely have even faster direct connections to the Internet. The Commission is concerned that the basis for the calculation in the Report will lead to connections that are too slow and proposes to use 28,800 bits per second instead of 8,000 bits per second in the bandwidth formula.

Question 29. The Commission requests comments on the use of 28,800 bits per second in the calculation of the minimum bandwidth connection between a RIN Node and the Internet in the formula appearing in the How Report.

## iv. Common Codes

The How Report does not address a standardized method of uniquely identifying transmission-owning public utilities and customers, nor does it address a standardized method of identifying facilities.

## (1) Company Codes

The Commission's experience with implementing standards for file transfers and electronic bulletin boards in the natural gas industry shows that the use of a common system of identifying companies enhances the efficiency of data transfers. The Commission is satisfied with the results of using DUNS numbers 48 as the standard to uniquely identify pipelines and shippers in the natural gas transactions.49 The Commission proposes to require the use of DUNS numbers to identify transmissionowning utilities and customers on RIN Nodes.

Question 30. The Commission requests comments on the use of DUNs numbers to identify RIN participants.

## (2) Common Location Codes

The Commission's experience in the natural gas industry also demonstrates that a common method of uniquely identifying location points will be needed to facilitate movement of power across the grid. The natural gas industry uses a sophisticated system of "smart" codes (PI–GRID Codes), developed by the Petroleum Information Corporation. This coding system uses "smart" codes, which identify each transaction point by such items as state, county, latitude, longitude and type of facility.<sup>50</sup> Thus, the code will tell RIN users where a posted receipt, delivery point or path is

<sup>¶ 61,002 (1994);</sup> Order 563–C, Order Accepting Modifications, 68 FERC ¶ 61,362 (1994); Order 563– D, Order Accepting Modifications, 69 FERC ¶ 61,418 (1994); Order 563–E, Order Granting Clarification, 70 FERC ¶ 61,188 (1995).

<sup>&</sup>lt;sup>46</sup> How Report at § 3.4.3.

<sup>&</sup>lt;sup>47</sup> A bit is the smallest unit of computer data and can have a value of zero or one. A byte is eight bits and is often used to represent a character of text.

<sup>&</sup>lt;sup>48</sup> DUNS numbers refer to the Data Universal Numbering System, maintained by Dun and Bradstreet.

<sup>&</sup>lt;sup>49</sup> See Standardized Data Sets and Communication Protocols for Electronic Bulletin Boards in Docket No. RM93–4, Order 563(a), supra n.45, Reg. Preambles at 31,034.

<sup>&</sup>lt;sup>50</sup> See Order 563(c), supra n.45, 68 FERC at 62.462–65.