

October 17, 2002

Dear Sir or Madam,

Thank you for your interest in the Power Quality Data Interchange Format (PQDIF). Enclosed you will find the **PQDIF Software Development Kit (SDK)** that Electrotek is making available free of charge. This SDK provides supplemental tools and information to facilitate implementing the IEEE 1159.3 power quality interchange format as it evolves.

If you're not familiar with PQDIF, please take a moment to read over the next section. If you *are* familiar with the format, feel free to skip ahead for more information about the SDK.

### **The PQDIF Format**

This SDK contains public-domain documentation and source code to help companies evaluate and implement PQDIF in their products. In general, this implementation will involve native or component-based implementation of the PQDIF format.

- *Native implementation* of PQDIF is possible in any operating system or CPU, including DOS, Unix, Linux, Macintosh, Java, and others.
- *Component-based implementation* (using the component included as part of the SDK) requires a 32-bit Windows operating system, and uses the Microsoft Component Object Model (COM).

Either way of implementing PQDIF will allow a product to read or write out standard PQDIF files. See the IEEE 1159.3 draft standard for more details a discussion of how to go about implementing it.

### **The PQDIF SDK**

The SDK package you are holding should consist of the following:

• <i>IEEE 1159.3 Draft 9 of Standard</i>	Detailed specification of PQDIF, including physical (file layout) and logical structures.
• CD-ROM disc or ZIP disk.	This contains the software and source code that make up the SDK. The full contents are described in the next section.

The CD-ROM or ZIP disk should contain the following:

<b>Top-level directory</b>	<b>Sub-directory</b>	<b>Description</b>
• \Documents		Contains all documents related to the PQDIF format specification and SDK.
• \Native		Contains sample code for implementing PQDIF natively, in any operating system or CPU.
	\PQDIFr	Example C program (command-line) for reading a PQDIF file into proprietary structures or displaying it. Source code included.

	\PQDIFw	Example C program (command-line) for writing a PQDIF file from proprietary structures. Source code included.
	\UtilSrc	Utility source code for natively reading or writing PQDIF from C and Java. For C, this includes several modules that are also used in the example programs PQDIFr and PQDIFw. <b>Note:</b> The Java source code is experimental and is strictly for example only.
•	\Tools	Programs to visualize and create PQDIF files
	\PQDCvt	Tool to convert ETK/BMI PASS Files to PQDIF
	\PQDUtil15	VB tool to visualize simple PQDIF files - source included
•	\PQDIFPOF	Sample data files downloaded from active Dranetz/BMI Signature System into a PQDIFPOF directory as defined in Annex C of 1159.3. Good examples of most common PQDIF types
•	\PQDCom	Contains source code, setup images, and sample code for implementing PQDIF using the Windows 32-bit COM component.
	\PQDcom4	Source code for a COM component that supports creating, reading, and writing PQDIF files. Used by PQDUtil15.
	\PQDCom4\pqdiflib	PQDIF C++ class library used by PQDCOM4
	\UtilSrc	Utility source code for using the COM component from C++ and Visual Basic.

#### Other Resources

Here are some web pages you might find of interest:

- The PQDIF SDK web page. <http://grouper.ieee.org/groups/1159/3/>

Please feel free to contact me at any time with questions, comments, or suggestions.

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Sincerely,

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