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1  PWG-IMAGING-SYSTEM-POWER-MIB DEFINITIONS ::= BEGIN
2
3  IMPORTS
4      MODULE-IDENTITY, OBJECT-TYPE, Integer32, Counter32, Gauge32,
5      enterprises, NOTIFICATION-TYPE
6      FROM SNMPv2-SMI -- RFC 2578
7      TEXTUAL-CONVENTION, DateAndTime, DisplayString, TruthValue,
8      RowStatus
9      FROM SNMPv2-TC -- RFC 2579
10     MODULE-COMPLIANCE, OBJECT-GROUP, NOTIFICATION-GROUP
11     FROM SNMPv2-CONF -- RFC 2580
12     SnmpAdminString
13     FROM SNMP-FRAMEWORK-MIB; -- RFC 3411
14
15 powPowerMIB MODULE-IDENTITY
16     LAST-UPDATED "201102140000Z" -- 14 February 2011
17     ORGANIZATION "Printer Working Group, a Program of IEEE/ISTO"
18     CONTACT-INFO
19         "Workgroup for Imaging Management Solutions (WIMS)
20
21         Web: http://www.pwg.org
22         FTP: ftp://ftp.pwg.org/pub/pwg/wims
23         Email: wims@pwg.org (subscribers only - see Web page above)
24
25         Editor: Ira McDonald
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30         Tel: +1 906-494-2434 or 906-494-2697
31         Email: blueroofofmusic@gmail.com"
32     DESCRIPTION
33         "The MIB module for passive monitoring and optional active
34         management of power state for Imaging Systems and optionally for
35         their associated Subunit components.
36
37         Copyright (C) IEEE/ISTO PWG (2011)."
38     ::= { enterprises pwg(2699) mibs(1) powPowerMIB(6) }
39
40 powMIBNotifications OBJECT IDENTIFIER ::= { powPowerMIB 0 }
41 powMIBObjects OBJECT IDENTIFIER ::= { powPowerMIB 1 }
42 powMIBConformance OBJECT IDENTIFIER ::= { powPowerMIB 2 }
43 powMIBObjectGroups OBJECT IDENTIFIER ::= { powMIBConformance 2 }
44 powMIBNotificationGroups OBJECT IDENTIFIER ::= { powMIBConformance 3 }
45
46 --
47 -- Textual Conventions
48 --
49
50 PowPowerStateTC ::= TEXTUAL-CONVENTION
51     STATUS current
52     DESCRIPTION
53         "The power state of this component (System or Subunit).
54

```

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55      Usage:  Vendor extensions allowed ONLY for primary power states
56      (on, standby, suspend, hibernate, and offSoft).  Vendor
57      extensions are intentionally not defined for reset or
58      interrupts."
59  REFERENCE
60      "Table 3 in section 7.3 in DMTF CIM Power Profile (DSP 1027)."
```

```

61  SYNTAX      INTEGER {
62      other(1),          -- DO NOT USE
63      unknown(2),       -- initial default ONLY
64      on(20),           -- On - fully operational
65      onVendor1(21),
66      onVendor2(22),
67      onVendor3(23),
68      onVendor4(24),
69      onVendor5(25),
70      standby(30),     -- Standby - light sleep
71      standbyVendor1(31),
72      standbyVendor2(32),
73      standbyVendor3(33),
74      standbyVendor4(34),
75      standbyVendor5(35),
76      suspend(40),     -- Suspend - deep sleep
77      suspendVendor1(41),
78      suspendVendor2(42),
79      suspendVendor3(43),
80      suspendVendor4(44),
81      suspendVendor5(45),
82      resetSoft(50),   -- Reset - soft reset
83      offHard(60),     -- Off Hard - no power consumed
84      hibernate(70),   -- Hibernate - context save, off
85      hibernateVendor1(71),
86      hibernateVendor2(72),
87      hibernateVendor3(73),
88      hibernateVendor4(74),
89      hibernateVendor5(75),
90      offSoft(80),     -- Off Soft - w/ auxiliary power
91      offSoftVendor1(81),
92      offSoftVendor2(82),
93      offSoftVendor3(83),
94      offSoftVendor4(84),
95      offSoftVendor5(85),
96      resetHard(90),   -- hard off, power on
97      resetMBR(100),   -- Master Bus Reset
98      resetNMI(110),   -- Non-Maskable Interrupt
99      offSoftGraceful(120), -- orderley shutdown, soft off
100     offHardGraceful(130), -- orderly shutdown, hard off
101     resetMBRGraceful(140), -- orderly shutdown, MBR reset
102     resetSoftGraceful(150), -- orderly shutdown, soft reset
103     resetHardGraceful(160), -- orderly shutdown, hard reset
104     resetINIT(170),    -- Diagnostic Interrupt (INIT)
105     notApplicable(180),
106     noChange(190)
107 }
108
```

```
109 PowPowerCalendarMonthTC ::= TEXTUAL-CONVENTION
110     STATUS         current
111     DESCRIPTION
112         "The trigger month (January through December or any) for this
113         calendar policy."
114     REFERENCE
115         "schedMonth in IETF Schedule MIB (RFC 3231)."
```

```
116     SYNTAX         INTEGER {
117         january(1),
118         february(2),
119         march(3),
120         april(4),
121         may(5),
122         june(6),
123         july(7),
124         august(8),
125         september(9),
126         october(10),
127         november(11),
128         december(12),
129         any(13)
130     }
131
```

```
132 PowPowerCalendarDayOfWeekTC ::= TEXTUAL-CONVENTION
133     STATUS         current
134     DESCRIPTION
135         "The trigger day of week (Sunday through Saturday or any) for
136         this calendar policy."
137     REFERENCE
138         "schedWeekDay in IETF Schedule MIB (RFC 3231)."
```

```
139     SYNTAX         INTEGER {
140         sunday(1),
141         monday(2),
142         tuesday(3),
143         wednesday(4),
144         thursday(5),
145         friday(6),
146         saturday(7),
147         any(8)
148     }
149
```

```
150 PowPowerComponentTypeTC ::= TEXTUAL-CONVENTION
151     STATUS         current
152     DESCRIPTION
153         "The type of this component (System or Subunit) on this
154         Imaging System."
155     REFERENCE
156         "IcSubunitTypeTC, icSubunitType, and icKeySubunitType in
157         PWG Imaging System State and Counter MIB v2 (PWG 5106.3);
158         prtAlertGroup in IETF Printer MIB (RFC 1759/3805);
159         PrtAlertGroupTC in IANA Printer MIB (RFC 3805
160         and http://www.iana.org/assignments/ianaprinter-mib)."
```

```
161     SYNTAX         INTEGER {
162         other(1),
```

```
163         unknown(2),
164         console(4),
165         system(5),
166         cover(6),
167         inputTray(8),
168         outputTray(9),
169         marker(10),
170         mediaPath(13),
171         inputChannel(14),
172         interpreter(15),
173         finisher(30),
174         interface(40),
175         scanner(50),
176         scanMediaPath(51),
177         faxModem(60),
178         outputChannel(70),
179         storage(80),
180         processor(90)
181     }
182
183 PowPowerPolicyMaxAccessTC ::= TEXTUAL-CONVENTION
184     STATUS         current
185     DESCRIPTION
186         "Maximum access to policies supported on this Imaging System."
187     REFERENCE
188         "pow[Timeout/Calendar/Event]RowStatus in this MIB."
189     SYNTAX         INTEGER {
190         other(1),           -- accessible-for-notify
191         unknown(2),        -- unknown - DO NOT USE
192         none(3),           -- no policy access supported
193         readOnly(4),       -- read-only
194         readWrite(5),      -- read-write
195         readCreate(6)     -- read-create
196     }
197
198 PowPowerRequestStatusTC ::= TEXTUAL-CONVENTION
199     STATUS         current
200     DESCRIPTION
201         "The current processing status of this power state change
202         request for this component (System or Subunit)."
```

```

217     DESCRIPTION
218         "The timeout predicate for this policy.
219         'none' means no timeout predicate (i.e., ignore for trigger).
220         'activity' means incoming job, console input, etc.
221         'inactivity' means no incoming job, console input, etc."
222     REFERENCE
223         "Section 4.4.11 printer-state in IETF IPP/1.1 (RFC 2911)."
```

SYNTAX INTEGER {

```

225     other(1),
226     unknown(2),
227     none(3),
228     activity(4),
229     inactivity(5)
230 }
231
232 --
233 -- General Group
234 --
235
236 powGeneral OBJECT IDENTIFIER ::= { powMIBObjects 1 }
237
238 powGeneralNaturalLanguage OBJECT-TYPE
239     SYNTAX DisplayString (SIZE(0..63))
240     MAX-ACCESS read-only
241     STATUS current
242     DESCRIPTION
243         "The natural language tag (RFC 5646) for all localized text
244         string objects (syntax of SnmpAdminString) defined in this MIB
245         specified as a visible US-ASCII string (ISO 646) that MUST NOT
246         contain any US-ASCII control characters (0x00 to 0x1F inclusive,
247         or 0x7F).
248
249         If this object is empty, then the natural language for
250         all localized text string objects defined in this MIB MUST
251         be 'en-US' (US English)."
```

REFERENCE

```

252     "IETF Tags for Identifying Languages (RFC 5646);
253     jobNaturalLanguageTag attribute in Job Mon MIB (RFC 2707);
254     prtGeneralCurrentLocalization and prtLocalizationTable in
255     IETF Printer MIB (RFC 1759/3805);
256     attributes-natural-language in IETF IPP/1.1 (RFC 2911)."
```

DEFVAL { "en-US" } -- US English default

```

257 ::= { powGeneral 1 }
258
259
260
261 -- Reserved 'powGeneral.2'
262 -- Reserved 'powGeneral.3'
263 -- Reserved 'powGeneral.4'
264 -- Reserved 'powGeneral.5'
265 -- Reserved 'powGeneral.6'
266 -- Reserved 'powGeneral.7'
267 -- Reserved 'powGeneral.8'
268 -- Reserved 'powGeneral.9'
269
270 powGeneralPolicyMaxAccess OBJECT-TYPE
```

```

271     SYNTAX         PowPowerPolicyMaxAccessTC
272     MAX-ACCESS     read-only
273     STATUS         current
274     DESCRIPTION
275         "Maximum access to policies supported on this Imaging System."
276     REFERENCE
277         "pow[Timeout/Calendar/Event]RowStatus in this MIB."
278     DEFVAL         { none }             -- no policies (OPTIONAL)
279     ::= { powGeneral 10 }
280
281 powGeneralPowerUsageIsRMSWatts OBJECT-TYPE
282     SYNTAX         TruthValue
283     MAX-ACCESS     read-only
284     STATUS         current
285     DESCRIPTION
286         "Specifies whether the power consumption objects on this Imaging
287         System use units of Root Mean Square (RMS) watts (true) or
288         unnormalized so-called peak watts (false)."
289     REFERENCE
290         "powSupportTable and powMeterTable in this MIB."
291     DEFVAL         { false }           -- not RMS watts
292     ::= { powGeneral 11 }
293
294 -- Reserved 'powGeneral.12'
295 -- Reserved 'powGeneral.13'
296
297 powGeneralCanRequestPowerStates OBJECT-TYPE
298     SYNTAX         DisplayString (SIZE(0..255))
299     MAX-ACCESS     read-only
300     STATUS         current
301     DESCRIPTION
302         "Specifies all of the stable and transitional power states that
303         can be requested (in policies or operations) on this Imaging
304         System.
305
306         For example: '20,30,40,50,60,70,80,90'."
307
308         Usage: Conforming values MUST contain a comma-delimited list of
309         values of PowPowerStateTC in this MIB or the empty string
310         (none)."
311     REFERENCE
312         "PowPowerStateTC in this MIB."
313     DEFVAL         { "" }             -- none
314     ::= { powGeneral 14 }
315
316 --
317 -- Monitor Group
318 --
319
320 powMonitor          OBJECT IDENTIFIER ::= { powMIBObjects 2 }
321
322 powMonitorTable OBJECT-TYPE
323     SYNTAX         SEQUENCE OF PowMonitorEntry
324     MAX-ACCESS     not-accessible

```

```

325     STATUS      current
326     DESCRIPTION
327         "A table for the monitored components (System or Subunit)
328         on this Imaging System."
329     ::= { powMonitor 1 }
330
331 powMonitorEntry OBJECT-TYPE
332     SYNTAX      PowMonitorEntry
333     MAX-ACCESS  not-accessible
334     STATUS      current
335     DESCRIPTION
336         "An entry for one monitored component (System or Subunit)
337         on this Imaging System."
338     INDEX       { powMonitorIndex }
339     ::= { powMonitorTable 1 }
340
341 PowMonitorEntry ::= SEQUENCE {
342     powMonitorIndex      Integer32,
343     powMonitorPowerState PowPowerStateTC,
344     powMonitorPowerStateMessage SnmpAdminString,
345     powMonitorComponentType PowPowerComponentTypeTC,
346     powMonitorComponentReferenceId Integer32
347 }
348
349 powMonitorIndex OBJECT-TYPE
350     SYNTAX      Integer32 (1..2147483647)
351     MAX-ACCESS  not-accessible
352     STATUS      current
353     DESCRIPTION
354         "Primary key of this monitor entry for one referenced component
355         (System or Subunit) on this Imaging System.
356
357         Usage: The referenced component is uniquely specified by values
358         of powMonitorComponentType and powMonitorComponentReferenceId.
359
360         Usage: Values of this object MUST be persistent across system
361         reboots, except in the case of major system reconfigurations.
362
363         DEFVAL intentionally omitted - index object."
364     ::= { powMonitorEntry 1 }
365
366 powMonitorPowerState OBJECT-TYPE
367     SYNTAX      PowPowerStateTC
368     MAX-ACCESS  read-only
369     STATUS      current
370     DESCRIPTION
371         "The current power state of this monitored component (System
372         or Subunit) on this Imaging System.
373
374         Usage: Imaging Systems MUST implement 'on' and 'offSoft'.
375         Imaging Systems SHOULD implement the 'standby', 'suspend', and
376         'hibernate' values.
377
378         Usage: Imaging Systems MUST support standard power states

```

379 (e.g., 'standby') whenever they support vendor extensions (e.g.,
 380 'standbyVendor1')."

381 **REFERENCE**

382 "Table 3 in section 7.3 in DMTF CIM Power Profile (DSP 1027);
 383 powLogPowerState in this MIB."

384 **DEFVAL** { unknown } -- unknown power state

385 ::= { powMonitorEntry 2 }

386

387 powMonitorPowerStateMessage **OBJECT-TYPE**

388 **SYNTAX** SnmpAdminString (SIZE(0..255))

389 **MAX-ACCESS** read-only

390 **STATUS** current

391 **DESCRIPTION**

392 "The human-readable message that describes, explains, or
 393 qualifies the current power state for this monitored component
 394 (System or Subunit) on this Imaging System, specified as a
 395 Unicode string encoded in UTF-8 (RFC 3629) in the natural
 396 language specified in powGeneralNaturalLanguage.

397

398 For example: 'On from calendar trigger (34 watts)'.

399

400 Usage: Conforming values:

401 (a) MUST identify the power state;

402 (b) SHOULD identify the method of entry to the power state,

403 e.g., 'from timeout trigger' or 'from user request';

404 (c) SHOULD identify the nominal power consumption, e.g.,

405 '(34 watts)'; and

406 (d) MAY include any other power-related information, e.g., 'can

407 accept jobs' or 'can process jobs'."

408 **REFERENCE**

409 "powLogPowerStateMessage in this MIB."

410 **DEFVAL** { "" } -- no power state message

411 ::= { powMonitorEntry 3 }

412

413 powMonitorComponentType **OBJECT-TYPE**

414 **SYNTAX** PowPowerComponentTypeTC

415 **MAX-ACCESS** read-only

416 **STATUS** current

417 **DESCRIPTION**

418 "The type of this monitored component (System or Subunit)
 419 on this Imaging System.

420

421 Usage: Imaging Systems MUST implement the 'system' value.

422 Imaging Systems SHOULD implement the 'scanner' and 'marker'

423 values, if these components are present."

424 **REFERENCE**

425 "IcSubunitTypeTC, icSubunitType, and icKeySubunitType in

426 PWG Imaging System State and Counter MIB v2 (PWG 5106.3);

427 prtAlertGroup in IETF Printer MIB (RFC 1759/3805);

428 PrtAlertGroupTC in IANA Printer MIB (RFC 3805

429 and <http://www.iana.org/assignments/ianaprinter-mib>)."

430 **DEFVAL** { system } -- system object

431 ::= { powMonitorEntry 4 }

432


```

433 powMonitorComponentReferenceId OBJECT-TYPE
434     SYNTAX      Integer32 (0..2147483647)
435     MAX-ACCESS  read-only
436     STATUS      current
437     DESCRIPTION
438         "The reference identifier of this monitored component (System
439         or Subunit) on this Imaging System or zero (if not available,
440         because there is no corresponding component in another MIB).
441
442     Usage: Conforming values:
443         (a) for System, MUST be the corresponding hrDeviceIndex (for
444         hrDevicePrinter) in IETF Host Resources MIB (RFC 2790), if IETF
445         Printer MIB (RFC 3805) is implemented; otherwise, SHOULD be a
446         corresponding hrDeviceIndex (e.g., for hrDeviceProcessor);
447         (b) for Subunit defined in IETF Printer MIB (RFC 3805), MUST be
448         the corresponding Subunit index (e.g., prtInputIndex), if IETF
449         Printer MIB (RFC 3805) is implemented; otherwise SHOULD be a
450         corresponding hrDeviceIndex (e.g., for hrDeviceKeyboard);
451         (c) For Finisher, MUST be the corresponding finDeviceIndex in
452         IETF Finisher MIB (RFC 3806), if IETF Printer MIB (RFC 3805) and
453         IETF Finisher MIB (RFC 3806) are implemented; otherwise SHOULD
454         be a corresponding hrDeviceIndex;
455         (d) for Interface, MUST be the corresponding ifIndex in IETF
456         MIB-II (RFC 1213);
457         (e) for FaxModem, MUST be the corresponding hrDeviceIndex
458         (for hrDeviceModem) in IETF Host Resources MIB (RFC 2790);
459         (f) for Processor, MUST be the corresponding hrDeviceIndex
460         (for hrDeviceProcessor or hrDeviceCoprocesor) in IETF Host
461         Resources MIB (RFC 2790);
462         (g) for Scanner or ScanMediaPath, MUST be the corresponding
463         hrDeviceIndex (for hrDeviceOther or vendor OID) in IETF Host
464         Resources MIB (RFC 2790);
465         (h) for OutputChannel, MUST be the corresponding hrDeviceIndex
466         (for hrDeviceNetwork or vendor OID) in IETF Host Resources MIB
467         (RFC 2790); and
468         (i) for Storage, MUST be the corresponding hrStorageIndex in
469         IETF Host Resources MIB (RFC 2790)."
470     REFERENCE
471         "hrDeviceIndex and hrDeviceType in IETF Host Resources MIB
472         (RFC 2790);
473         powLogComponentReferenceId in this MIB."
474     DEFVAL      { 0 }          -- no component reference ID
475     ::= { powMonitorEntry 5 }
476
477 --
478 -- Log Group
479 --
480
481 powLog          OBJECT IDENTIFIER ::= { powMIBObjects 3 }
482
483 powLogTable OBJECT-TYPE
484     SYNTAX      SEQUENCE OF PowLogEntry
485     MAX-ACCESS  not-accessible
486     STATUS      current

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```

487     DESCRIPTION
488         "A table of the log entries on this Imaging System.
489
490         Usage: Conforming implementations SHOULD support at least 10
491         entries concurrently in the powLogTable and MUST always delete
492         the oldest entry first (FIFO) for memory management, i.e., the
493         powLogTable always consists of a sliding window of entries with
494         contiguous values of powLogIndex."
495     ::= { powLog 1 }
496
497 powLogEntry OBJECT-TYPE
498     SYNTAX      PowLogEntry
499     MAX-ACCESS  not-accessible
500     STATUS      current
501     DESCRIPTION
502         "An entry for a log entry on this Imaging System."
503     INDEX       { powLogIndex }
504     ::= { powLogTable 1 }
505
506 PowLogEntry ::= SEQUENCE {
507     powLogIndex      Integer32,
508     powLogPowerState PowPowerStateTC,
509     powLogPowerStateMessage SnmpAdminString,
510     powLogPowerStateDateAndTime DateAndTime,
511     powLogComponentType PowPowerComponentTypeTC,
512     powLogComponentReferenceId Integer32
513 }
514
515 powLogIndex OBJECT-TYPE
516     SYNTAX      Integer32 (1..2147483647)
517     MAX-ACCESS  not-accessible
518     STATUS      current
519     DESCRIPTION
520         "Primary key of this log entry on this Imaging System.
521
522         Usage: Values of this object MUST monotonically increase over
523         time and MUST NOT reset in the lifetime of this Imaging System.
524
525         Usage: Values of this object MUST be persistent across system
526         reboots.
527
528         DEFVAL intentionally omitted - index object."
529     ::= { powLogEntry 1 }
530
531 powLogPowerState OBJECT-TYPE
532     SYNTAX      PowPowerStateTC
533     MAX-ACCESS  read-only
534     STATUS      current
535     DESCRIPTION
536         "The logged power state of the referenced component (System or
537         Subunit) on this Imaging System.
538
539         Usage: Imaging Systems MUST implement 'on' and 'offSoft'.
540         Imaging Systems SHOULD implement the 'standby', 'suspend', and

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541         'hibernate' values.
542
543     Usage: Imaging Systems MUST support standard power states
544     (e.g., 'standby') whenever they support vendor extensions (e.g.,
545     'standbyVendor1').
546
547     Usage: Imaging Systems SHOULD only add entries to powLogTable
548     when a power state transition occurs (i.e., successive rows in
549     the powLogTable for the same component SHOULD NOT have the same
550     power state)."
551 REFERENCE
552     "Table 3 in section 7.3 in DMTF CIM Power Profile (DSP 1027);
553     powMonitorPowerState in this MIB."
554 DEFVAL     { unknown }           -- unknown power state
555 ::= { powLogEntry 2 }
556
557 powLogPowerStateMessage OBJECT-TYPE
558     SYNTAX      SnmpAdminString (SIZE(0..255))
559     MAX-ACCESS  read-only
560     STATUS      current
561     DESCRIPTION
562         "The human-readable message that describes, explains, or
563         qualifies the logged power state for the referenced component
564         (System or Subunit) on this Imaging System, specified as a
565         Unicode string encoded in UTF-8 (RFC 3629) in the natural
566         language specified in powGeneralNaturalLanguage."
567     REFERENCE
568         "powMonitorPowerStateMessage in this MIB."
569     DEFVAL     { "" }           -- no power state message
570     ::= { powLogEntry 3 }
571
572 powLogPowerStateDateAndTime OBJECT-TYPE
573     SYNTAX      DateAndTime
574     MAX-ACCESS  read-only
575     STATUS      current
576     DESCRIPTION
577         "The date and time of this logged power state transition on the
578         referenced component (System or Subunit) on this Imaging
579         System."
580     REFERENCE
581         "hrSystemDate in IETF Host Resources MIB (RFC 2790)."
582     ::= { powLogEntry 4 }
583
584 powLogComponentType OBJECT-TYPE
585     SYNTAX      PowPowerComponentTypeTC
586     MAX-ACCESS  read-only
587     STATUS      current
588     DESCRIPTION
589         "The type of this logged component (System or Subunit) on this
590         Imaging System.
591
592     Usage: Imaging Systems MUST implement the 'system' value.
593     Imaging Systems SHOULD implement the 'scanner' and 'marker'
594     values, if these components are present."

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```

595     REFERENCE
596         "IcSubunitTypeTC, icSubunitType, and icKeySubunitType in
597         PWG Imaging System State and Counter MIB v2 (PWG 5106.3);
598         prtAlertGroup in IETF Printer MIB (RFC 1759/3805);
599         PrtAlertGroupTC in IANA Printer MIB (RFC 3805
600         and http://www.iana.org/assignments/ianaprinter-mib);
601         powMonitorComponentType in this MIB."
602     DEFVAL         { system }             -- system object
603     ::= { powLogEntry 5 }
604
605 powLogComponentReferenceId OBJECT-TYPE
606     SYNTAX         Integer32 (0..2147483647)
607     MAX-ACCESS     read-only
608     STATUS         current
609     DESCRIPTION
610         "The reference identifier of this logged component (System
611         or Subunit) on this Imaging System or zero (none)."
```

REFERENCE

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612     "powMonitorComponentReferenceId in this MIB."
613     DEFVAL         { 0 }                 -- no component reference ID
614     ::= { powLogEntry 6 }
615
616
617 --
618 -- Support Group
619 --
620
621 powSupport          OBJECT IDENTIFIER ::= { powMIBObjects 4 }
622
623 powSupportTable OBJECT-TYPE
624     SYNTAX         SEQUENCE OF PowSupportEntry
625     MAX-ACCESS     not-accessible
626     STATUS         current
627     DESCRIPTION
628         "A table of the supported stable power states for the monitored
629         components (System or Subunit) on this Imaging System."
630     ::= { powSupport 1 }
631
632 powSupportEntry OBJECT-TYPE
633     SYNTAX         PowSupportEntry
634     MAX-ACCESS     not-accessible
635     STATUS         current
636     DESCRIPTION
637         "An entry for one supported stable power state for one monitored
638         component (System or Subunit) on this Imaging System."
639     INDEX         { powMonitorIndex,
640                 powSupportPowerState }
641     ::= { powSupportTable 1 }
642
643 PowSupportEntry ::= SEQUENCE {
644     powSupportPowerState          PowPowerStateTC,
645     powSupportPowerInactiveWatts  Integer32,
646     powSupportPowerActiveWatts    Integer32,
647     powSupportCanAcceptJobs       TruthValue,
648     powSupportCanProcessJobs      TruthValue,
```

```

649         powSupportCanRequestPowerState   TruthValue,
650         powSupportCanUseInterfaces        DisplayString,
651         powSupportPowerPeakWatts         Integer32
652     }
653
654 powSupportPowerState OBJECT-TYPE
655     SYNTAX      PowPowerStateTC
656     MAX-ACCESS  not-accessible
657     STATUS      current
658     DESCRIPTION
659         "The secondary key of this supported stable power state on this
660         component (System or Subunit) on this Imaging System.
661
662         Usage: The value of this object MUST be a stable power state.
663
664         Usage: Imaging Systems MUST implement 'on' and 'offSoft'.
665         Imaging Systems SHOULD implement the 'standby', 'suspend', and
666         'hibernate' values.
667
668         Usage: Imaging Systems MUST support standard power states
669         (e.g., 'standby') whenever they support vendor extensions (e.g.,
670         'standbyVendor1').
671
672         DEFVAL intentionally omitted - index object."
673     REFERENCE
674         "Table 3 in section 7.3 in DMTF CIM Power Profile (DSP 1027);
675         powMonitorPowerState in this MIB."
676     ::= { powSupportEntry 1 }
677
678 powSupportPowerInactiveWatts OBJECT-TYPE
679     SYNTAX      Integer32 (0..2147483647)
680     UNITS       "watts"
681     MAX-ACCESS  read-only
682     STATUS      current
683     DESCRIPTION
684         "The nominal power consumption in watts of this stable power
685         state on this component (System or Subunit) on this Imaging
686         System or zero (for less than one watt, i.e., nominal none),
687         when the component is in a inactive operational state (e.g.,
688         Idle or Stopped).
689
690         Usage: This nominal power consumption MUST be determined by the
691         manufacturer and NOT by actual power consumption measurement."
692     DEFVAL      { 0 }          -- no inactive power usage
693     ::= { powSupportEntry 2 }
694
695 powSupportPowerActiveWatts OBJECT-TYPE
696     SYNTAX      Integer32 (0..2147483647)
697     UNITS       "watts"
698     MAX-ACCESS  read-only
699     STATUS      current
700     DESCRIPTION
701         "The nominal power consumption in watts of this stable power
702         state on this component (System or Subunit) on this Imaging

```

```
703         System or zero (for less than one watt, i.e., nominal none),
704         when the component is in an active operational state (e.g.,
705         Processing or Testing).
706
707         Usage: This nominal power consumption MUST be determined by the
708         manufacturer and NOT by actual power consumption measurement."
709     DEFVAL         { 0 }             -- no active power usage
710     ::= { powSupportEntry 3 }
711
712 powSupportCanAcceptJobs OBJECT-TYPE
713     SYNTAX         TruthValue
714     MAX-ACCESS     read-only
715     STATUS         current
716     DESCRIPTION
717         "Specifies whether this stable power state on this component
718         (System or Subunit) on this Imaging System can accept incoming
719         jobs (unless disabled by Administrator).
720
721         Usage: This supported power state capability MUST NOT report
722         the disabled condition."
723     REFERENCE
724         "Section 3.1.1 Disable-Printer in IETF IPP/1.1 System Admin
725         (RFC 3998)."
726     DEFVAL         { false }        -- cannot accept jobs in state
727     ::= { powSupportEntry 4 }
728
729 powSupportCanProcessJobs OBJECT-TYPE
730     SYNTAX         TruthValue
731     MAX-ACCESS     read-only
732     STATUS         current
733     DESCRIPTION
734         "Specifies whether this stable power state on this component
735         (System or Subunit) on this Imaging System can process new or
736         queued jobs (unless paused by Administrator).
737
738         Usage: This supported power state capability MUST NOT report
739         the paused condition."
740     REFERENCE
741         "Section 3.2.7 Pause-Printer in IETF IPP/1.1 (RFC 2911)."
742     DEFVAL         { false }        -- cannot process jobs in state
743     ::= { powSupportEntry 5 }
744
745 powSupportCanRequestPowerState OBJECT-TYPE
746     SYNTAX         TruthValue
747     MAX-ACCESS     read-only
748     STATUS         current
749     DESCRIPTION
750         "Specifies whether this stabled power state on this component
751         (System or Subunit) on this Imaging System is valid for use in
752         power requests and power policies."
753     REFERENCE
754         "powRequestPowerState in this MIB."
755     DEFVAL         { false }        -- not valid state for requests
756     ::= { powSupportEntry 6 }
```

```

757
758 powSupportCanUseInterfaces OBJECT-TYPE
759     SYNTAX      DisplayString (SIZE(0..255))
760     MAX-ACCESS  read-only
761     STATUS      current
762     DESCRIPTION
763         "Specifies whether this stable power state on this component
764         (System or Subunit) on this Imaging System can use the specified
765         interfaces.
766
767         For example: '1,3,4'.
768
769         Usage: Conforming values MUST contain a comma-delimited list of
770         values of ifIndex in IETF MIB-II (RFC 1213) or the empty string
771         (none)."
```

REFERENCE

```

772     "ifIndex in IETF MIB-II (RFC 1213)."
```

```

773     DEFVAL      { "" }          -- cannot use any interfaces
774     ::= { powSupportEntry 7 }
```

```

775
776
777 powSupportPowerPeakWatts OBJECT-TYPE
778     SYNTAX      Integer32 (0..2147483647)
779     UNITS       "watts"
780     MAX-ACCESS  read-only
781     STATUS      current
782     DESCRIPTION
783         "The peak power consumption in watts of this stable power
784         state on this component (System or Subunit) on this Imaging
785         System or zero (for less than one watt, i.e., peak none),
786         when the component is in an active operational state (e.g.,
787         Processing or Testing).
788
789         Usage: This peak power consumption MUST be determined by the
790         manufacturer and NOT by actual power consumption measurement."
```

```

791     DEFVAL      { 0 }          -- no peak power usage
792     ::= { powSupportEntry 8 }
```

```

793
794 --
795 -- Transition Group
796 --
797
798 powTransition          OBJECT IDENTIFIER ::= { powMIBObjects 5 }
```

```

799
800 powTransitionTable OBJECT-TYPE
801     SYNTAX      SEQUENCE OF PowTransitionEntry
802     MAX-ACCESS  not-accessible
803     STATUS      current
804     DESCRIPTION
805         "A table of the supported transitions between stable power
806         states for the monitored components (System or Subunit) on this
807         Imaging System."
808     ::= { powTransition 1 }
```

```

809
810 powTransitionEntry OBJECT-TYPE
```

```

811     SYNTAX      PowTransitionEntry
812     MAX-ACCESS  not-accessible
813     STATUS      current
814     DESCRIPTION
815         "An entry for one supported transition between stable power
816         states for the monitored components (System or Subunit) on this
817         Imaging System."
818     INDEX      { powMonitorIndex,
819                 powTransitionStartPowerState,
820                 powTransitionEndPowerState }
821     ::= { powTransitionTable 1 }
822
823 PowTransitionEntry ::= SEQUENCE {
824     powTransitionStartPowerState  PowPowerStateTC,
825     powTransitionEndPowerState    PowPowerStateTC,
826     powTransitionStateChangeSeconds Integer32
827 }
828
829 powTransitionStartPowerState OBJECT-TYPE
830     SYNTAX      PowPowerStateTC
831     MAX-ACCESS  not-accessible
832     STATUS      current
833     DESCRIPTION
834         "The secondary key of this supported power transition on this
835         component (System or Subunit) on this Imaging System.
836
837         Usage: The value of this object MUST be a stable power state.
838
839         Usage: Imaging Systems MUST implement 'on' and 'offSoft'.
840         Imaging Systems SHOULD implement the 'standby', 'suspend', and
841         'hibernate' values.
842
843         Usage: Imaging Systems MUST support standard power states
844         (e.g., 'standby') whenever they support vendor extensions (e.g.,
845         'standbyVendor1').
846
847         DEFVAL intentionally omitted - index object."
848     REFERENCE
849         "Table 3 in section 7.3 in DMTF CIM Power Profile (DSP 1027);
850         powMonitorPowerState in this MIB."
851     ::= { powTransitionEntry 1 }
852
853 powTransitionEndPowerState OBJECT-TYPE
854     SYNTAX      PowPowerStateTC
855     MAX-ACCESS  not-accessible
856     STATUS      current
857     DESCRIPTION
858         "The tertiary key of this supported power transition on this
859         component (System or Subunit) on this Imaging System.
860
861         Usage: The value of this object MUST be a stable power state.
862
863         Usage: Imaging Systems MUST implement 'on' and 'offSoft'.
864         Imaging Systems SHOULD implement the 'standby', 'suspend', and

```



```

865         'hibernate' values.
866
867     Usage: Imaging Systems MUST support standard power states
868     (e.g., 'standby') whenever they support vendor extensions (e.g.,
869     'standbyVendor1').
870
871     DEFVAL intentionally omitted - index object."
872 REFERENCE
873     "Table 3 in section 7.3 in DMTF CIM Power Profile (DSP 1027);
874     powMonitorPowerState in this MIB."
875 ::= { powTransitionEntry 2 }
876
877 powTransitionStateChangeSeconds OBJECT-TYPE
878     SYNTAX      Integer32 (0..2147483647)
879     UNITS       "seconds"
880     MAX-ACCESS  read-only
881     STATUS      current
882     DESCRIPTION
883         "The nominal duration in seconds of this supported power state
884         transition on this component (System or Subunit) on this Imaging
885         System or zero (for less than one second, i.e., nominal
886         immediate).
887
888         Usage: This nominal transition time MUST be determined by the
889         manufacturer and NOT by actual transition duration measurement."
890     DEFVAL      { 0 }          -- nominal immediate
891 ::= { powTransitionEntry 3 }
892
893 --
894 -- Request Group
895 --
896
897 powRequest OBJECT IDENTIFIER ::= { powMIBObjects 6 }
898
899 powRequestTable OBJECT-TYPE
900     SYNTAX      SEQUENCE OF PowRequestEntry
901     MAX-ACCESS  not-accessible
902     STATUS      current
903     DESCRIPTION
904         "A table of the requested power state changes for the monitored
905         components (System or Subunit) on this Imaging System."
906     ::= { powRequest 1 }
907
908 powRequestEntry OBJECT-TYPE
909     SYNTAX      PowRequestEntry
910     MAX-ACCESS  not-accessible
911     STATUS      current
912     DESCRIPTION
913         "An entry for one requested power state change for one monitored
914         component (System or Subunit) on this Imaging System."
915     INDEX      { powMonitorIndex }
916     ::= { powRequestTable 1 }
917
918 PowRequestEntry ::= SEQUENCE {

```

```

919         powRequestPowerState          PowPowerStateTC,
920         powRequestStatus                PowPowerRequestStatusTC
921     }
922
923 powRequestPowerState OBJECT-TYPE
924     SYNTAX          PowPowerStateTC
925     MAX-ACCESS      read-write
926     STATUS          current
927     DESCRIPTION
928         "The requested target power state for this component (System
929         or Subunit) on this Imaging System."
930     REFERENCE
931         "Table 3 in section 7.3 in DMTF CIM Power Profile (DSP 1027);
932         powMonitorPowerState in this MIB;
933         powSupportCanRequestPowerState in this MIB;
934         powRequestStatus in this MIB."
935     DEFVAL          { unknown }          -- unknown power state
936     ::= { powRequestEntry 1 }
937
938 powRequestStatus OBJECT-TYPE
939     SYNTAX          PowPowerRequestStatusTC
940     MAX-ACCESS      read-only
941     STATUS          current
942     DESCRIPTION
943         "The current processing status of this power request for this
944         component (System or Subunit) on this Imaging System."
945     REFERENCE
946         "powRequestPowerState in this MIB."
947     DEFVAL          { none }            -- no request ever processed
948     ::= { powRequestEntry 2 }
949
950 --
951 -- Timeout Group
952 --
953
954 powTimeout          OBJECT IDENTIFIER ::= { powMIBObjects 7 }
955
956 powTimeoutTable OBJECT-TYPE
957     SYNTAX          SEQUENCE OF PowTimeoutEntry
958     MAX-ACCESS      not-accessible
959     STATUS          current
960     DESCRIPTION
961         "A table of the configured timeout policies for the monitored
962         components (System or Subunit) on this Imaging System."
963     ::= { powTimeout 1 }
964
965 powTimeoutEntry OBJECT-TYPE
966     SYNTAX          PowTimeoutEntry
967     MAX-ACCESS      not-accessible
968     STATUS          current
969     DESCRIPTION
970         "An entry for one configured timeout policy for one monitored
971         component (System or Subunit) on this Imaging System."
972     INDEX          { powMonitorIndex,

```

```

973         powTimeoutIndex }
974 ::= { powTimeoutTable 1 }
975
976 PowTimeoutEntry ::= SEQUENCE {
977     powTimeoutIndex                Integer32,
978     powTimeoutRequestPowerState    PowPowerStateTC,
979     powTimeoutStartPowerState      PowPowerStateTC,
980     powTimeoutPredicate            PowPowerTimeoutPredicateTC,
981     powTimeoutSeconds              Integer32,
982     powTimeoutRowStatus            RowStatus
983 }
984
985 powTimeoutIndex OBJECT-TYPE
986     SYNTAX      Integer32 (1..2147483647)
987     MAX-ACCESS  not-accessible
988     STATUS      current
989     DESCRIPTION
990         "Secondary key of this timeout policy for this component
991         (System or Subunit) on this Imaging System.
992
993         Usage: Values of this object MUST be persistent across system
994         reboots, except in the case of major system reconfigurations.
995
996         DEFVAL intentionally omitted - index object."
997     ::= { powTimeoutEntry 1 }
998
999 powTimeoutRequestPowerState OBJECT-TYPE
1000     SYNTAX      PowPowerStateTC
1001     MAX-ACCESS  read-create
1002     STATUS      current
1003     DESCRIPTION
1004         "The requested target power state for this component (System
1005         or Subunit) on this Imaging System when this timeout policy is
1006         triggered."
1007     REFERENCE
1008         "Table 3 in section 7.3 in DMTF CIM Power Profile (DSP 1027);
1009         powMonitorPowerState in this MIB;
1010         powSupportCanRequestPowerState in this MIB;
1011         powRequestPowerState in this MIB."
1012     DEFVAL      { unknown }          -- unknown power state
1013     ::= { powTimeoutEntry 2 }
1014
1015 powTimeoutStartPowerState OBJECT-TYPE
1016     SYNTAX      PowPowerStateTC
1017     MAX-ACCESS  read-create
1018     STATUS      current
1019     DESCRIPTION
1020         "The specific start power state for this component (System
1021         or Subunit) on this Imaging System for this timeout policy."
1022     REFERENCE
1023         "Table 3 in section 7.3 in DMTF CIM Power Profile (DSP 1027);
1024         powMonitorPowerState in this MIB."
1025     DEFVAL      { notApplicable }    -- no start power state
1026     ::= { powTimeoutEntry 3 }

```

```

1027
1028 powTimeoutPredicate OBJECT-TYPE
1029     SYNTAX      PowPowerTimeoutPredicateTC
1030     MAX-ACCESS  read-create
1031     STATUS      current
1032     DESCRIPTION
1033         "The predicate for this timeout policy on this component (System
1034         or Subunit) on this Imaging System."
1035     REFERENCE
1036         "Table 3 in section 7.3 in DMTF CIM Power Profile (DSP 1027);
1037         powMonitorPowerState in this MIB."
1038     DEFVAL      { none }          -- no predicate
1039     ::= { powTimeoutEntry 4 }
1040
1041 powTimeoutSeconds OBJECT-TYPE
1042     SYNTAX      Integer32 (0..2147483647)
1043     UNITS       "seconds"
1044     MAX-ACCESS  read-create
1045     STATUS      current
1046     DESCRIPTION
1047         "The nominal duration in seconds of this timeout policy
1048         on this component (System or Subunit) on this Imaging System
1049         or zero (none)."

```

```

1081
1082 powCalendarEntry OBJECT-TYPE
1083     SYNTAX      PowCalendarEntry
1084     MAX-ACCESS  not-accessible
1085     STATUS      current
1086     DESCRIPTION
1087         "An entry for one configured calendar policy for one monitored
1088         component (System or Subunit) on this Imaging System."
1089     INDEX       { powMonitorIndex,
1090                 powCalendarIndex }
1091     ::= { powCalendarTable 1 }
1092
1093 PowCalendarEntry ::= SEQUENCE {
1094     powCalendarIndex      Integer32,
1095     powCalendarRequestPowerState PowPowerStateTC,
1096     powCalendarRunOnce    TruthValue,
1097     powCalendarDayOfWeek  PowPowerCalendarDayOfWeekTC,
1098     powCalendarMonth      PowPowerCalendarMonthTC,
1099     powCalendarDay        Integer32,
1100     powCalendarHour       Integer32,
1101     powCalendarMinute     Integer32,
1102     powCalendarRowStatus  RowStatus
1103 }
1104
1105 powCalendarIndex OBJECT-TYPE
1106     SYNTAX      Integer32 (1..2147483647)
1107     MAX-ACCESS  not-accessible
1108     STATUS      current
1109     DESCRIPTION
1110         "Secondary key of this calendar policy for this component
1111         (System or Subunit) on this Imaging System.
1112
1113         Usage: Values of this object MUST be persistent across system
1114         reboots, except in the case of major system reconfigurations.
1115
1116         DEFVAL intentionally omitted - index object."
1117     ::= { powCalendarEntry 1 }
1118
1119 powCalendarRequestPowerState OBJECT-TYPE
1120     SYNTAX      PowPowerStateTC
1121     MAX-ACCESS  read-create
1122     STATUS      current
1123     DESCRIPTION
1124         "The requested target power state for this component (System
1125         or Subunit) on this Imaging System when this calendar policy is
1126         triggered."
1127     REFERENCE
1128         "Table 3 in section 7.3 in DMTF CIM Power Profile (DSP 1027);
1129         powMonitorPowerState in this MIB;
1130         powSupportCanRequestPowerState in this MIB;
1131         powRequestPowerState in this MIB."
1132     DEFVAL     { unknown }          -- unknown power state
1133     ::= { powCalendarEntry 2 }
1134

```

```
1135 powCalendarRunOnce OBJECT-TYPE
1136     SYNTAX      TruthValue
1137     MAX-ACCESS  read-create
1138     STATUS      current
1139     DESCRIPTION
1140         "Specifies whether this calendar policy on this component
1141         (System or Subunit) on this Imaging System can be triggered
1142         more than once (false) or exactly once (true)."
```

REFERENCE

```
1144     "schedType in IETF Schedule MIB (RFC 3231)."
```

DEFVAL { false } -- multiple executions

```
1146 ::= { powCalendarEntry 3 }
```

```
1147
1148 powCalendarDayOfWeek OBJECT-TYPE
1149     SYNTAX      PowPowerCalendarDayOfWeekTC
1150     MAX-ACCESS  read-create
1151     STATUS      current
1152     DESCRIPTION
1153         "The trigger day of week (Sunday through Saturday or any) for
1154         this calendar policy on this component (System or Subunit) on
1155         this Imaging System."
```

REFERENCE

```
1157     "schedWeekDay in IETF Schedule MIB (RFC 3231)."
```

DEFVAL { any } -- any day of week

```
1159 ::= { powCalendarEntry 4 }
```

```
1160
1161 powCalendarMonth OBJECT-TYPE
1162     SYNTAX      PowPowerCalendarMonthTC
1163     MAX-ACCESS  read-create
1164     STATUS      current
1165     DESCRIPTION
1166         "The trigger month (January through December or any) for this
1167         calendar policy on this component (System or Subunit) on this
1168         Imaging System."
```

REFERENCE

```
1170     "schedMonth in IETF Schedule MIB (RFC 3231)."
```

DEFVAL { any } -- any month

```
1172 ::= { powCalendarEntry 5 }
```

```
1173
1174 powCalendarDay OBJECT-TYPE
1175     SYNTAX      Integer32 (0..31)
1176     MAX-ACCESS  read-create
1177     STATUS      current
1178     DESCRIPTION
1179         "The trigger day or zero (any) for this calendar policy on
1180         this component (System or Subunit) on this Imaging System.
1181
1182         Usage: '1' is the first day of the month, '2' is the second
1183         day of the month, etc."
```

REFERENCE

```
1185     "schedDay in IETF Schedule MIB (RFC 3231)."
```

DEFVAL { 0 } -- any day of month

```
1187 ::= { powCalendarEntry 6 }
```

```
1188
```

```

1189 powCalendarHour OBJECT-TYPE
1190     SYNTAX      Integer32 (0..23)
1191     MAX-ACCESS  read-create
1192     STATUS      current
1193     DESCRIPTION
1194         "The trigger hour for this calendar policy on this component
1195         (System or Subunit) on this Imaging System.
1196
1197         Usage: '0' is the first hour of the day (12:00-12:59am), '1' is
1198         the second hour of the day (1:00-1:59 am), etc. Exactly
1199         midnight (i.e., 12:00am) is specified by a value of zero for
1200         powCalendarHour and a value of zero for powCalendarMinute."
1201     REFERENCE
1202         "schedHour in IETF Schedule MIB (RFC 3231)."
```

```

1203     DEFVAL      { 0 }          -- first hour of the day
1204     ::= { powCalendarEntry 7 }
1205
1206 powCalendarMinute OBJECT-TYPE
1207     SYNTAX      Integer32 (0..59)
1208     MAX-ACCESS  read-create
1209     STATUS      current
1210     DESCRIPTION
1211         "The trigger minute for this calendar policy on this component
1212         (System or Subunit) on this Imaging System.
1213
1214         Usage: '0' is the first minute of the hour (e.g., 7:00pm), '1'
1215         is the second minute of the hour (e.g., 7:01pm), etc. Exactly
1216         at the hour (e.g., 7:00pm) is specified by a value of zero for
1217         powCalendarMinute."
1218     REFERENCE
1219         "schedMinute in IETF Schedule MIB (RFC 3231)."
```

```

1220     DEFVAL      { 0 }          -- first minute of the hour
1221     ::= { powCalendarEntry 8 }
1222
1223 powCalendarRowStatus OBJECT-TYPE
1224     SYNTAX      RowStatus
1225     MAX-ACCESS  read-create
1226     STATUS      current
1227     DESCRIPTION
1228         "The row status management object for this calendar policy
1229         on this component (System or Subunit) on this Imaging System."
1230     REFERENCE
1231         "schedRowStatus in IETF Schedule MIB (RFC 3231)."
```

```

1232     DEFVAL      { notInService }  -- inactive
1233     ::= { powCalendarEntry 9 }
1234
1235 --
1236 -- Event Group
1237 --
1238
1239 powEvent OBJECT IDENTIFIER ::= { powMIBObjects 9 }
1240
1241 powEventTable OBJECT-TYPE
1242     SYNTAX      SEQUENCE OF PowEventEntry
```

```

1243     MAX-ACCESS  not-accessible
1244     STATUS      current
1245     DESCRIPTION
1246         "A table of the configured event policies for the monitored
1247         components (System or Subunit) on this Imaging System."
1248     ::= { powEvent 1 }
1249
1250 powEventEntry OBJECT-TYPE
1251     SYNTAX      PowEventEntry
1252     MAX-ACCESS  not-accessible
1253     STATUS      current
1254     DESCRIPTION
1255         "An entry for one configured event policy for one monitored
1256         component (System or Subunit) on this Imaging System."
1257     INDEX       { powMonitorIndex,
1258                 powEventIndex }
1259     ::= { powEventTable 1 }
1260
1261 PowEventEntry ::= SEQUENCE {
1262     powEventIndex          Integer32,
1263     powEventRequestPowerState PowPowerStateTC,
1264     powEventName           DisplayString,
1265     powEventRowStatus      RowStatus
1266 }
1267
1268 powEventIndex OBJECT-TYPE
1269     SYNTAX      Integer32 (1..2147483647)
1270     MAX-ACCESS  not-accessible
1271     STATUS      current
1272     DESCRIPTION
1273         "Secondary key of this event policy for this component
1274         (System or Subunit) on this Imaging System.
1275
1276         Usage: Values of this object MUST be persistent across system
1277         reboots, except in the case of major system reconfigurations.
1278
1279         DEFVAL intentionally omitted - index object."
1280     ::= { powEventEntry 1 }
1281
1282 powEventRequestPowerState OBJECT-TYPE
1283     SYNTAX      PowPowerStateTC
1284     MAX-ACCESS  read-create
1285     STATUS      current
1286     DESCRIPTION
1287         "The requested target power state for this component (System
1288         or Subunit) on this Imaging System when this event policy is
1289         triggered."
1290     REFERENCE
1291         "Table 3 in section 7.3 in DMTF CIM Power Profile (DSP 1027);
1292         powMonitorPowerState in this MIB;
1293         powSupportCanRequestPowerState in this MIB;
1294         powRequestPowerState in this MIB."
1295     DEFVAL      { unknown }          -- unknown power state
1296     ::= { powEventEntry 2 }

```



```

1297
1298 powEventName OBJECT-TYPE
1299     SYNTAX      DisplayString (SIZE(0..255))
1300     MAX-ACCESS  read-create
1301     STATUS      current
1302     DESCRIPTION
1303         "The trigger event name for this event policy on this component
1304         (System or Subunit) on this Imaging System, specified as a
1305         visible US-ASCII string (ISO 646) that MUST NOT contain any
1306         US-ASCII control characters (0x00 to 0x1F inclusive, or 0x7F).
1307
1308         For example: 'jam'.
1309
1310         Usage: Conforming values MUST contain either:
1311         (a) the exact case-sensitive label (starting with a lowercase
1312         letter, 'a..z') of an enumerated value in the PrtAlertCodeTC
1313         textual convention in the IANA Printer MIB (e.g., 'jam'); or
1314         (b) a case-sensitive keyword (starting with an uppercase letter,
1315         'A..Z') vendor event name (e.g., 'AcmeCrackedHousing')."
1316     REFERENCE
1317         "prtAlertCode in IETF Printer MIB (RFC 1759/3805);
1318         PrtAlertCodeTC in IANA Printer MIB (RFC 3805
1319         and http://www.iana.org/assignments/ianaprinter-mib)."
1320     DEFVAL      { "" }          -- no event name
1321     ::= { powEventEntry 3 }
1322
1323 powEventRowStatus OBJECT-TYPE
1324     SYNTAX      RowStatus
1325     MAX-ACCESS  read-create
1326     STATUS      current
1327     DESCRIPTION
1328         "The row status management object for this event policy
1329         on this component (System or Subunit) on this Imaging System."
1330     REFERENCE
1331         "schedRowStatus in IETF Schedule MIB (RFC 3231)."
1332     DEFVAL      { notInService } -- inactive
1333     ::= { powEventEntry 4 }
1334
1335 --
1336 -- Counter Group
1337 --
1338
1339 powCounter          OBJECT IDENTIFIER ::= { powMIBObjects 10 }
1340
1341 powCounterTable OBJECT-TYPE
1342     SYNTAX      SEQUENCE OF PowCounterEntry
1343     MAX-ACCESS  not-accessible
1344     STATUS      current
1345     DESCRIPTION
1346         "A table of the power transition counters for the monitored
1347         components (System or Subunit) on this Imaging System."
1348     ::= { powCounter 1 }
1349
1350 powCounterEntry OBJECT-TYPE

```

```

1351     SYNTAX      PowCounterEntry
1352     MAX-ACCESS  not-accessible
1353     STATUS      current
1354     DESCRIPTION
1355         "An entry for the power transition counters for one monitored
1356         component (System or Subunit) on this Imaging System."
1357     INDEX       { powMonitorIndex }
1358     ::= { powCounterTable 1 }
1359
1360 PowCounterEntry ::= SEQUENCE {
1361     powCounterHibernateTransitions Counter32,
1362     powCounterOnTransitions Counter32,
1363     powCounterStandbyTransitions Counter32,
1364     powCounterSuspendTransitions Counter32
1365 }
1366
1367 powCounterHibernateTransitions OBJECT-TYPE
1368     SYNTAX      Counter32
1369     UNITS       "transitions"
1370     MAX-ACCESS  read-only
1371     STATUS      current
1372     DESCRIPTION
1373         "Lifetime number of transitions into the Hibernate power state
1374         of this component (System or Subunit).
1375
1376         DEFVAL intentionally omitted - counter object."
1377     REFERENCE
1378         "powMonitorPowerState and powLogPowerState in this MIB."
1379     ::= { powCounterEntry 1 }
1380
1381 powCounterOnTransitions OBJECT-TYPE
1382     SYNTAX      Counter32
1383     UNITS       "transitions"
1384     MAX-ACCESS  read-only
1385     STATUS      current
1386     DESCRIPTION
1387         "Lifetime number of transitions into the On power state
1388         of this component (System or Subunit).
1389
1390         DEFVAL intentionally omitted - counter object."
1391     REFERENCE
1392         "powMonitorPowerState and powLogPowerState in this MIB."
1393     ::= { powCounterEntry 2 }
1394
1395 powCounterStandbyTransitions OBJECT-TYPE
1396     SYNTAX      Counter32
1397     UNITS       "transitions"
1398     MAX-ACCESS  read-only
1399     STATUS      current
1400     DESCRIPTION
1401         "Lifetime number of transitions into the Standby power state
1402         of this component (System or Subunit).
1403
1404         DEFVAL intentionally omitted - counter object."

```

```

1405     REFERENCE
1406         "powMonitorPowerState and powLogPowerState in this MIB."
1407     ::= { powCounterEntry 3 }
1408
1409 powCounterSuspendTransitions OBJECT-TYPE
1410     SYNTAX      Counter32
1411     UNITS       "transitions"
1412     MAX-ACCESS  read-only
1413     STATUS      current
1414     DESCRIPTION
1415         "Lifetime number of transitions into the Suspend power state
1416         of this component (System or Subunit).
1417
1418         DEFVAL intentionally omitted - counter object."
1419     REFERENCE
1420         "powMonitorPowerState and powLogPowerState in this MIB."
1421     ::= { powCounterEntry 4 }
1422
1423     --
1424     -- Meter Group
1425     --
1426
1427 powMeter          OBJECT IDENTIFIER ::= { powMIBObjects 11 }
1428
1429 powMeterTable OBJECT-TYPE
1430     SYNTAX      SEQUENCE OF PowMeterEntry
1431     MAX-ACCESS  not-accessible
1432     STATUS      current
1433     DESCRIPTION
1434         "A table of the power consumption meters for the monitored
1435         components (System or Subunit) on this Imaging System."
1436     ::= { powMeter 1 }
1437
1438 powMeterEntry OBJECT-TYPE
1439     SYNTAX      PowMeterEntry
1440     MAX-ACCESS  not-accessible
1441     STATUS      current
1442     DESCRIPTION
1443         "An entry for the power consumption meters for one monitored
1444         component (System or Subunit) on this Imaging System."
1445     INDEX      { powMonitorIndex }
1446     ::= { powMeterTable 1 }
1447
1448 PowMeterEntry ::= SEQUENCE {
1449     powMeterPowerMetersAreActual      TruthValue,
1450     powMeterPowerCurrentWatts         Gauge32,
1451     powMeterPowerPeakWatts            Gauge32,
1452     powMeterPowerCurrentMonthKWH      Gauge32,
1453     powMeterPowerPreviousMonthKWH     Gauge32,
1454     powMeterPowerLifetimeKWH          Counter32
1455 }
1456
1457 powMeterPowerMetersAreActual OBJECT-TYPE
1458     SYNTAX      TruthValue

```

```

1459     MAX-ACCESS    read-only
1460     STATUS        current
1461     DESCRIPTION
1462         "Specifies whether power consumption meters on this component
1463         (System or Subunit) are based on actual measurement (true) or
1464         software estimation (false)."
```

REFERENCE

```

1465         "powGeneralPowerUsageIsRMSWatts and powMeterTable in this MIB."
1466     DEFVAL        { false }          -- software estimation
1467     ::= { powMeterEntry 1 }
```

powMeterPowerCurrentWatts OBJECT-TYPE

```

1470     SYNTAX        Gauge32
1471     UNITS         "watts"
1472     MAX-ACCESS    read-only
1473     STATUS        current
1474     DESCRIPTION
1475         "Current power consumption in watts of this System or Subunit
1476         or zero (for less than one watt, i.e., nominal none).
1477
1478         DEFVAL intentionally omitted - gauge object."
```

REFERENCE

```

1479         "powMeterPowerMetersAreActual in this MIB."
1480     ::= { powMeterEntry 2 }
```

powMeterPowerPeakWatts OBJECT-TYPE

```

1481     SYNTAX        Gauge32
1482     UNITS         "watts"
1483     MAX-ACCESS    read-only
1484     STATUS        current
1485     DESCRIPTION
1486         "Peak power consumption in watts of this System or Subunit
1487         or zero (for less than one watt, i.e., nominal none), since
1488         last reboot of this Imaging System.
1489
1490         DEFVAL intentionally omitted - gauge object."
```

REFERENCE

```

1491         "powMeterPowerMetersAreActual in this MIB."
1492     ::= { powMeterEntry 3 }
```

powMeterPowerCurrentMonthKWH OBJECT-TYPE

```

1493     SYNTAX        Gauge32
1494     UNITS         "kilowatthours"
1495     MAX-ACCESS    read-only
1496     STATUS        current
1497     DESCRIPTION
1498         "Current month power consumption in KWH of this System or
1499         Subunit or zero (for less than one watt, i.e., nominal none).
1500
1501         Usage: Because it specifies the *current* month's power
1502         consumption, the value of this object will change rapidly.
1503
1504         DEFVAL intentionally omitted - gauge object."
```

REFERENCE

```

1513     "powMeterPowerMetersAreActual in this MIB."
1514 ::= { powMeterEntry 4 }
1515
1516 powMeterPowerPreviousMonthKWH OBJECT-TYPE
1517     SYNTAX      Gauge32
1518     UNITS       "kilowatthours"
1519     MAX-ACCESS  read-only
1520     STATUS      current
1521     DESCRIPTION
1522         "Previous month power consumption in KWH of this System or
1523         Subunit or zero (for less than one watt, i.e., nominal none).
1524
1525         Usage: Because it specifies the *previous* month's power
1526         consumption, the value of this object will be stable and may be
1527         read on any day of the current month (for reliable accounting).
1528
1529         DEFVAL intentionally omitted - gauge object."
1530     REFERENCE
1531         "powMeterPowerMetersAreActual in this MIB."
1532     ::= { powMeterEntry 5 }
1533
1534 powMeterPowerLifetimeKWH OBJECT-TYPE
1535     SYNTAX      Counter32
1536     UNITS       "kilowatthours"
1537     MAX-ACCESS  read-only
1538     STATUS      current
1539     DESCRIPTION
1540         "Lifetime power consumption in KWH of this System or Subunit
1541         or zero (for less than one watt, i.e., nominal none).
1542
1543         DEFVAL intentionally omitted - counter object."
1544     REFERENCE
1545         "powMeterPowerMetersAreActual in this MIB."
1546     ::= { powMeterEntry 6 }
1547
1548 --
1549 -- Power Trap Group
1550 --
1551
1552 powPowerV2Trap NOTIFICATION-TYPE
1553     OBJECTS { powGeneralNaturalLanguage, powLogPowerState,
1554             powLogPowerStateMessage, powLogPowerStateDateAndTime,
1555             powLogComponentType, powLogComponentReferenceId }
1556     STATUS      current
1557     DESCRIPTION
1558         "This trap is sent (to registered or configured notification
1559         receivers) when a new power state transition is added to the
1560         'powLogTable'."
1561
1562         Note: The value of the powLogIndex index object is included in
1563         the instance qualifiers of the explicit variable bindings in
1564         this trap. The value of sysUpTime in IETF MIB-II (RFC 1213) is
1565         always included in SNMP traps, per RFC 3416."
1566     ::= { powMIBNotifications 1 }

```

```
1567
1568 --
1569 -- Conformance
1570 --
1571
1572 powPowerMIBCompliance MODULE-COMPLIANCE
1573     STATUS         current
1574     DESCRIPTION
1575         "The compliance statement for SNMP Agents that implement this
1576         Imaging System Power MIB."
1577     MODULE -- this module
1578     MANDATORY-GROUPS { powGeneralGroup, powMonitorGroup, powLogGroup }
1579
1580     GROUP     powSupportGroup
1581     DESCRIPTION
1582         "Support group - columnar capabilities objects.
1583
1584         An Imaging System MAY implement the Support group, for
1585         power capabilities."
1586
1587     GROUP     powTransitionGroup
1588     DESCRIPTION
1589         "Transition group - columnar capabilities objects.
1590
1591         An Imaging System MAY implement the Transition group, for
1592         power capabilities."
1593
1594     GROUP     powRequestGroup
1595     DESCRIPTION
1596         "Request group - columnar objects for settings.
1597
1598         An Imaging System MAY implement the Request group, for
1599         power state settings."
1600
1601     GROUP     powTimeoutGroup
1602     DESCRIPTION
1603         "Timeout group - columnar objects for settings.
1604
1605         An Imaging System SHOULD implement the Timeout group, for
1606         power policy settings."
1607
1608     GROUP     powCalendarGroup
1609     DESCRIPTION
1610         "Calendar group - columnar objects for settings.
1611
1612         An Imaging System MAY implement the Calendar group, for
1613         power policy settings."
1614
1615     GROUP     powEventGroup
1616     DESCRIPTION
1617         "Event group - columnar objects for settings.
1618
1619         An Imaging System MAY implement the Event group, for
1620         power policy settings."
```

```
1621
1622     GROUP    powCounterGroup
1623     DESCRIPTION
1624         "Counter group - columnar objects for status.
1625
1626         An Imaging System MAY implement the Counter group, for status."
1627
1628     GROUP    powMeterGroup
1629     DESCRIPTION
1630         "Meter group - columnar objects for status.
1631
1632         An Imaging System MAY implement the Meter group, for status."
1633
1634     GROUP    powPowerTrapGroup
1635     DESCRIPTION
1636         "Power Trap group - notifications.
1637
1638         An Imaging System SHOULD implement the Power Trap group."
1639
1640     OBJECT   powGeneralNaturalLanguage
1641     DESCRIPTION
1642         "If this object is empty, then the natural language for
1643         all localized text string objects defined in this MIB MUST
1644         be 'en-US' (US English)."
```

```
1675         Imaging Systems SHOULD implement the 'scanner' and 'marker'
1676         values, if these components are present."
1677
1678     OBJECT    powLogPowerState
1679     SYNTAX    INTEGER {
1680         on(20),
1681         offSoft(80)
1682     }
1683     DESCRIPTION
1684         "Imaging Systems MUST implement the 'on' and 'offSoft' values.
1685         Imaging Systems SHOULD implement the 'standby', 'suspend', and
1686         'hibernate' values.
1687         Imaging Systems MUST support standard power states (e.g.,
1688         'standby') whenever they support vendor extensions (e.g.,
1689         'standbyVendor1').
1690         Imaging Systems SHOULD only add entries to the powLogTable
1691         when a power state transition occurs (i.e., successive rows in
1692         the powLogTable for the same component SHOULD NOT have the same
1693         power state)."
```

```
1694
1695     OBJECT    powLogPowerStateMessage
1696     SYNTAX    SnmpAdminString (SIZE(0..63))
1697     DESCRIPTION
1698         "Imaging Systems MUST support at least 63 octets string length."
1699
1700     OBJECT    powLogComponentType
1701     SYNTAX    INTEGER {
1702         system(5)
1703     }
1704     DESCRIPTION
1705         "Imaging Systems MUST implement the 'system' value.
1706         Imaging Systems SHOULD implement the 'scanner' and 'marker'
1707         values, if these components are present."
1708
1709     OBJECT    powSupportCanUseInterfaces
1710     SYNTAX    DisplayString (SIZE(0..63))
1711     DESCRIPTION
1712         "Imaging Systems MUST support at least 63 octets string length."
1713
1714     OBJECT    powTimeoutRequestPowerState
1715     MIN-ACCESS    read-only
1716     DESCRIPTION
1717         "Imaging Systems MAY implement this object as read-only."
1718
1719     OBJECT    powTimeoutStartPowerState
1720     MIN-ACCESS    read-only
1721     DESCRIPTION
1722         "Imaging Systems MAY implement this object as read-only."
1723
1724     OBJECT    powTimeoutPredicate
1725     MIN-ACCESS    read-only
1726     DESCRIPTION
1727         "Imaging Systems MAY implement this object as read-only."
1728
```



```
1729     OBJECT powTimeoutSeconds
1730     MIN-ACCESS read-only
1731     DESCRIPTION
1732         "Imaging Systems MAY implement this object as read-only."
1733
1734     OBJECT powTimeoutRowStatus
1735     SYNTAX INTEGER {
1736         active(1),
1737         notInService(2)
1738     }
1739     MIN-ACCESS read-only
1740     DESCRIPTION
1741         "Imaging Systems MUST implement 'active' and 'notInService'.
1742         Imaging Systems MAY implement this object as read-only."
1743
1744     OBJECT powCalendarRequestPowerState
1745     MIN-ACCESS read-only
1746     DESCRIPTION
1747         "Imaging Systems MAY implement this object as read-only."
1748
1749     OBJECT powCalendarRunOnce
1750     MIN-ACCESS read-only
1751     DESCRIPTION
1752         "Imaging Systems MAY implement this object as read-only."
1753
1754     OBJECT powCalendarDayOfWeek
1755     MIN-ACCESS read-only
1756     DESCRIPTION
1757         "Imaging Systems MAY implement this object as read-only."
1758
1759     OBJECT powCalendarMonth
1760     MIN-ACCESS read-only
1761     DESCRIPTION
1762         "Imaging Systems MAY implement this object as read-only."
1763
1764     OBJECT powCalendarDay
1765     MIN-ACCESS read-only
1766     DESCRIPTION
1767         "Imaging Systems MAY implement this object as read-only."
1768
1769     OBJECT powCalendarHour
1770     MIN-ACCESS read-only
1771     DESCRIPTION
1772         "Imaging Systems MAY implement this object as read-only."
1773
1774     OBJECT powCalendarMinute
1775     MIN-ACCESS read-only
1776     DESCRIPTION
1777         "Imaging Systems MAY implement this object as read-only."
1778
1779     OBJECT powCalendarRowStatus
1780     SYNTAX INTEGER {
1781         active(1),
1782         notInService(2)
```

```

1783     }
1784     MIN-ACCESS    read-only
1785     DESCRIPTION
1786         "Imaging Systems MUST implement 'active' and 'notInService'.
1787         Imaging Systems MAY implement this object as read-only."
1788
1789     OBJECT    powEventRequestPowerState
1790     MIN-ACCESS    read-only
1791     DESCRIPTION
1792         "Imaging Systems MAY implement this object as read-only."
1793
1794     OBJECT    powEventName
1795     SYNTAX    DisplayString (SIZE(0..63))
1796     MIN-ACCESS    read-only
1797     DESCRIPTION
1798         "Imaging Systems MUST support at least 63 octets string length.
1799         Imaging Systems MAY implement this object as read-only."
1800
1801     OBJECT    powEventRowStatus
1802     SYNTAX    INTEGER {
1803         active(1),
1804         notInService(2)
1805     }
1806     MIN-ACCESS    read-only
1807     DESCRIPTION
1808         "Imaging Systems MUST implement 'active' and 'notInService'.
1809         Imaging Systems MAY implement this object as read-only."
1810
1811     ::= { powMIBConformance 1 }
1812
1813     --
1814     -- Conformance Groups
1815     --
1816
1817     powGeneralGroup OBJECT-GROUP
1818     OBJECTS {
1819         powGeneralNaturalLanguage,
1820         powGeneralPolicyMaxAccess,
1821         powGeneralPowerUsageIsRMSWatts,
1822         powGeneralCanRequestPowerStates
1823     }
1824     STATUS    current
1825     DESCRIPTION
1826         "General group - scalar status objects."
1827     ::= { powMIBObjectGroups 1 }
1828
1829     powMonitorGroup OBJECT-GROUP
1830     OBJECTS {
1831         powMonitorPowerState,
1832         powMonitorPowerStateMessage,
1833         powMonitorComponentType,
1834         powMonitorComponentReferenceId
1835     }
1836     STATUS    current

```

```
1837     DESCRIPTION
1838         "Monitor group - columnar status objects."
1839     ::= { powMIBObjectGroups 2 }
1840
1841 powLogGroup OBJECT-GROUP
1842     OBJECTS {
1843         powLogPowerState,
1844         powLogPowerStateMessage,
1845         powLogPowerStateDateAndTime,
1846         powLogComponentType,
1847         powLogComponentReferenceId
1848     }
1849     STATUS      current
1850     DESCRIPTION
1851         "Log group - columnar status objects."
1852     ::= { powMIBObjectGroups 3 }
1853
1854 powSupportGroup OBJECT-GROUP
1855     OBJECTS {
1856         powSupportPowerInactiveWatts,
1857         powSupportPowerActiveWatts,
1858         powSupportCanAcceptJobs,
1859         powSupportCanProcessJobs,
1860         powSupportCanRequestPowerState,
1861         powSupportCanUseInterfaces,
1862         powSupportPowerPeakWatts
1863     }
1864     STATUS      current
1865     DESCRIPTION
1866         "Support group - columnar capabilities objects."
1867     ::= { powMIBObjectGroups 4 }
1868
1869 powTransitionGroup OBJECT-GROUP
1870     OBJECTS {
1871         powTransitionStateChangeSeconds
1872     }
1873     STATUS      current
1874     DESCRIPTION
1875         "Transition group - columnar capabilities objects."
1876     ::= { powMIBObjectGroups 5 }
1877
1878 powRequestGroup OBJECT-GROUP
1879     OBJECTS {
1880         powRequestPowerState,
1881         powRequestStatus
1882     }
1883     STATUS      current
1884     DESCRIPTION
1885         "Request group - columnar objects for settings."
1886     ::= { powMIBObjectGroups 6 }
1887
1888 powTimeoutGroup OBJECT-GROUP
1889     OBJECTS {
1890         powTimeoutRequestPowerState,
```

```
1891         powTimeoutStartPowerState,
1892         powTimeoutPredicate,
1893         powTimeoutSeconds,
1894         powTimeoutRowStatus
1895     }
1896     STATUS         current
1897     DESCRIPTION
1898         "Timeout group - columnar objects for settings."
1899     ::= { powMIBObjectGroups 7 }
1900
1901 powCalendarGroup OBJECT-GROUP
1902     OBJECTS {
1903         powCalendarRequestPowerState,
1904         powCalendarRunOnce,
1905         powCalendarDayOfWeek,
1906         powCalendarMonth,
1907         powCalendarDay,
1908         powCalendarHour,
1909         powCalendarMinute,
1910         powCalendarRowStatus
1911     }
1912     STATUS         current
1913     DESCRIPTION
1914         "Calendar group - columnar objects for settings."
1915     ::= { powMIBObjectGroups 8 }
1916
1917 powEventGroup OBJECT-GROUP
1918     OBJECTS {
1919         powEventRequestPowerState,
1920         powEventName,
1921         powEventRowStatus
1922     }
1923     STATUS         current
1924     DESCRIPTION
1925         "Event group - columnar objects for settings."
1926     ::= { powMIBObjectGroups 9 }
1927
1928 powCounterGroup OBJECT-GROUP
1929     OBJECTS {
1930         powCounterHibernateTransitions,
1931         powCounterOnTransitions,
1932         powCounterStandbyTransitions,
1933         powCounterSuspendTransitions
1934     }
1935     STATUS         current
1936     DESCRIPTION
1937         "Counter group - columnar objects for status."
1938     ::= { powMIBObjectGroups 10 }
1939
1940 powMeterGroup OBJECT-GROUP
1941     OBJECTS {
1942         powMeterPowerMetersAreActual,
1943         powMeterPowerCurrentWatts,
1944         powMeterPowerPeakWatts,
```

```
1945         powMeterPowerCurrentMonthKWH,  
1946         powMeterPowerPreviousMonthKWH,  
1947         powMeterPowerLifetimeKWH  
1948     }  
1949     STATUS         current  
1950     DESCRIPTION  
1951         "Meter group - columnar objects for status."  
1952     ::= { powMIBObjectGroups 11 }  
1953  
1954 powPowerTrapGroup NOTIFICATION-GROUP  
1955     NOTIFICATIONS { powPowerV2Trap }  
1956     STATUS         current  
1957     DESCRIPTION  
1958         "Power Trap group - notifications."  
1959     ::= { powMIBNotificationGroups 1 }  
1960  
1961     END  
1962
```