

**PacifiCorp Energy**  
**Hydro Resources Department**  
**Wallowa Falls Hydroelectric Project Outage Report**

**Unit :** All Units - Wallowa Falls Hydroelectric Project  
**Forced Outage Type :** All Internal and External Outage Types  
**Forced Outage Cause:** All Causes

**From :** 3/1/1986  
**To :** 7/31/2011

Blue shading indicates confirmed or possible headgate closure.

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
	4/4/1986 12:45:00 AM		Plant down.		Wallowa Falls	4/4/1986 12:40:00 PM		1.1		
	4/11/1986 12:30:00 AM		Plant down.		Wallowa Falls	4/11/1986 13:15:00 PM		1.1		
	5/2/1986 17:40 PM		Generator off line, undervoltage / underfrequency & station service.		Wallowa Falls	5/2/1986 18:35 PM		1.1		
	5/24/1986 05:45:00 AM		Plant off, undervoltage light.		Wallowa Falls	5/24/1986 10:00:00 AM		1.1		
	6/2/1986 10:32:00 AM		Generator trip, rocks in tail race.		Wallowa Falls	6/5/1986 14:55 PM		1.1		
	6/5/1986 17:20 PM		Plant down, hail storm in Enterprise.		Wallowa Falls	6/5/1986 17:45 PM		1.1		
	6/16/1986 08:45:00 AM		Generator tripped over weekend, lighting.		Wallowa Falls	6/16/1986 09:05:00 AM		1.1		
	6/25/1986 12:05:00 AM		Generator trip, undervoltage / underfrequency.		Wallowa Falls	6/25/1986 12:00:00 PM		1.1		
	11/7/1986 08:25:00 AM		Plant tripped at Bosie Mill.		Wallowa Falls	11/7/1986 08:55:00 AM		1.1		
	11/24/1986 07:10:00 AM		Plant off line, tree in line at State park.		Wallowa Falls	11/25/1986 12:00:00 PM		1.1		
	1/06/1987 21:10 PM		Plant off line - unknown cause.		Wallowa Falls	1/6/1987 22:35 PM		1.1		
	1/14/1987 21:15 PM		Generator off line, line loss 69Kv line relayed 230.		Wallowa Falls	1/14/1987 21:35 PM		1.1		
	3/10/1987 10:20:00 AM		Generator trip, undervoltage / underfrequency.		Wallowa Falls	3/10/1987 11:00:00 AM		1.1		
	3/11/1987 time unknown		Put plant back on line - unknown cause and duration.		Wallowa Falls	3/11/1987 22:00 PM		1.1		
	3/12/1987 time unknown		Put plant back on line - unknown cause and duration.		Wallowa Falls	3/12/1987 10:50:00 AM		1.1		
	3/16/1987 06:00:00 AM		Generator over speed device not working properly.		Wallowa Falls	3/16/1987 14:50 PM		1.1		
	3/17/1987 10:25:00 AM		Plant down, undervoltage / underfrequency.		Wallowa Falls	3/17/1987 10:40:00 AM		1.1		
	3/23/1987 10:30 AM		Operator dispatched to forebay to check for blockage on penstock.		Wallowa Falls	date and time unknown		1.1		
	3/23/1987 13:35 PM		Generator trip, alarms penstock pressure, undervoltage / underfrequency.		Wallowa Falls	3/25/1987 12:15:00 PM		1.1		
	3/29/1987 14:45 PM		Generator down, alarms governor oil pressure, undervoltage / underfrequency.		Wallowa Falls	3/30/1987 15:53 PM		1.1		
	5/18/1987 13:09 PM		Generator off line, grounding card pulled, recloser disabled.		Wallowa Falls	5/18/1987 14:36PM		1.1		
	6/22/1987 13:15 PM		Plant off line, undervoltage / underfrequency & station service.		Wallowa Falls	6/22/1987 14:24 PM		1.1		
	7/10/1987 time unknown		Put plant back on line - unknown cause and duration.		Wallowa Falls	7/10/1987 11:15:00 PM		1.1		
	7/25/1987 time unknown		Put plant back on line - unknown cause and duration.		Wallowa Falls	7/25/1987 05:55:00 AM		1.1		
	7/25/1987 time unknown		Put plant back on line. Blown lighting arrestor on center phase Wonderlund feeder - unknown duration.		Wallowa Falls	7/25/1987 02:00:00 PM		1.1		
	7/27/1987 time unknown		Put plant back on line - unknown cause and duration.		Wallowa Falls	7/27/1987 05:30:00 AM		1.1		
	8/24/1987 time unknown		Put plant back on line, reset alarms - unknown cause and duration.		Wallowa Falls	8/24/1987 21:00 PM		1.1		
	8/24/1987 12:20:00 PM		Plant off due to 20kv fault.		Wallowa Falls	8/24/1987 13:20 PM		1.1		
	8/25/1987 10:50:00 AM		Plant off line, undervoltage / underfrequency & station service.		Wallowa Falls	8/25/1987 11:50:00 AM		1.1		
	9/22/1987 12:30:00 PM		Shut down machine, broken bucket.		Wallowa Falls	10/15/87 15:00 PM		1.1		

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
	9/22/1987		Broken bucket,closed headgate		Wallowa Falls	10/15/1987 time unknown		1.1		
	10/15/1987 20:00 PM		Plant off line, undervoltage / underfrequency.		Wallowa Falls	10/16/1987 13:50 PM		1.1		
	10/19/1987 12:45:00 PM		Put plant on line - unknown cause.		Wallowa Falls	10/19/1987 15:10 PM		1.1		
	12/5/1987 09:30:00 AM		Put plant on line - unknown cause.		Wallowa Falls	12/5/1987 10:05:00 AM		1.1		
	12/6/1987 13:00 PM		Put plant on line - unknown cause.		Wallowa Falls	12/6/1987 13:24 PM		1.1		
	12/18/1987 11:30:00 AM		Plant off line, undervoltage / underfrequency.		Wallowa Falls	12/18/1987 12:28:00 PM		1.1		
	1/11/1988 22:00 PM		Unit off line, water in pit.		Wallowa Falls	1/12/1988 16:24 PM		1.1		
	2/8/1988 15:00 PM		Generator off line due to low water level and tripped off underfrequency / undervoltage.		Wallowa Falls	2/08/1988 15:57 PM		1.1		
	2/9/1988 02:00:00 AM		Plant down, low forebay and underfrequency / undervoltage.		Wallowa Falls	2/09/1988 13:50 PM		1.1		
	2/15/1988 13:30 PM		Put plant on line - unknown cause.		Wallowa Falls	2/15/1988 14:20 PM		1.1		
	3/12/1988 time unknown		Put unit on line, was off line due to forebay level - unknown duration.		Wallowa Falls	3/12/1988 15:30 PM		1.1		
	4/6/1988 16:30 PM		Generator off line.		Wallowa Falls	4/7/1988 12:30:00 PM		1.1		
	4/12/1988 08:52:00 AM		Generator trip.		Wallowa Falls	4/12/1988 17:30 PM		1.1		
	5/7/1988 15:00 PM		Plant off line, undervoltage / underfrequency.		Wallowa Falls	5/7/1988 15:55 PM		1.1		
	7/25/1988 11:30:00 AM		Plant off line, undervoltage / underfrequency.		Wallowa Falls	7/25/1988 13:05 PM		1.1		
	8/12/1988 17:50 PM		Plant off line - unknown cause.		Wallowa Falls	8/16/1988 12:00:00 PM		1.1		
	8/23/1988 14:30 PM		Generator off line, targets on undervoltage / underfrequency, Wonderland feeder lock-out, station service and battery charger.		Wallowa Falls	9/16/1988 11:05:00 AM		1.1		
	10/5/1988 time unknown		Put plant back on line - unknown cause and duration.		Wallowa Falls	10/5/1988 13:30 PM		1.1		
	11/22/1988 08:45:00 AM		Plant off line, undervoltage / underfrequency & station service.		Wallowa Falls	date and time unknown		1.1		
	11/23/1988 11:15:00 AM		Generator off line, undervoltage / underfrequency & station service.		Wallowa Falls	11/23/1988 12:05:00 PM		1.1		
	2/3/1989 19:20 PM		Plant off line, annunciator points low forebay.		Wallowa Falls	2/3/1989 23:00 PM		1.1		
	2/18/1989 15:15 PM		Plant off line due to operation at Hurricane, had underfrequency / undervoltage and station service alarms.		Wallowa Falls	2/18/1989 15:50 PM		1.1		
	2/19/1989 05:10:00 AM		Plant off line due to low forebay level.		Wallowa Falls	2/19/1989 05:50:00 AM		1.1		
	2/22/1989 22:40 PM		Plant shut down, plant alarm undervoltage / under frequency.		Wallowa Falls	2/23/1989 15:55 PM		1.1		
	3/9/1989 time unknown		Plant off due to ops on 20kv, alarms undervoltage / under frequency and station service - unknown duration.		Wallowa Falls	3/9/1989 15:10 PM		1.1		
	4/11/1989 10:00:00 AM		Plant down, undervoltage / underfrequency and forebay water level targets.		Wallowa Falls	4/13/1989 17:28 PM		1.1		
	5/24/1989 04:49:00 AM		Station off line, alarms station service and underfrequency / undervoltage.		Wallowa Falls	5/24/1989 08:40:00 AM		1.1		
	6/15/1989 14:55 PM		Plant off line due to trouble on 20kv.		Wallowa Falls	6/15/1989 16:02 PM		1.1		
	6/27/1989 time unknown		Plant down, fence on tailrace. Work level indicator, not clear if headgate is closed.		Wallowa Falls	date and time unknown		1.1		
	6/29/1989 time unknown		Men to forebay, then plant is back on line.		Wallowa Falls	date and time unknown		1.1		
	7/12/1989 19:20 PM		Plant off line, both LO relays tripped.		Wallowa Falls	7/12/1989 20:10 PM		1.1		
	7/13/1989 16:30 PM		Plant off line due to Blue Mt line fault.		Wallowa Falls	07/13/1989 17:10 PM		1.1		
	7/19/1989 17:58 PM		Plant off line, alarms: station service, underfrequency / undervoltage and low forebay.		Wallowa Falls	date and time unknown		1.1		
	7/26/1989 14:57 PM		Plant off line, alarms: governor oil pressure, forebay water level and station service.		Wallowa Falls	7/26/1989 15:41 PM		1.1		
	9/10/1989 12:00:00 PM		Plant off line, forebay water level indication still bad.		Wallowa Falls	9/10/89 12:45 PM		1.1		
	9/12/1989 16:45 PM		Plant off line.		Wallowa Falls	9/12/1989 17:25 PM		1.1		
	9/30/1989 12:45:00 AM		Plant down.		Wallowa Falls	10/2/1989 15:00 PM		1.1		
	10/29/1989 10:00:00 AM		Plant tripped, wheel froze up.		Wallowa Falls	10/29/1989 11:05:00 AM		1.1		
	11/20/1989 08:45:00 AM		Plant down, top out of pole at Boy Scout Camp.		Wallowa Falls	11/22/1989 13:40 PM		1.1		

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	12/23/1989 23:15 PM		Plant off line, undervoltage / underfrequency and governor oil.		Wallowa Falls	12/24/1989 01:05:00 AM		1.1		
	1/7/1990 11:35:00 AM		Plant tripped by underfrequency / undervoltage and station service.		Wallowa Falls	1/7/1990 12:30:00 PM		1.1		
	1/8/1990 06:05:00 AM		Plant off line for alarms undervoltage / underfrequency, Wonderlund feed lockout and station service.		Wallowa Falls	1/9/1990 14:00 PM		1.1		
	1/17/1990 16:25 PM		Plant shut down undervoltage / underfrequency and station service - unknown duration.		Wallowa Falls	date and time unknown		1.1		
	1/18/1990 11:40:00 AM		Plant off line due to "CB" 4W12 trip.		Wallowa Falls	1/18/1990 12:10:00 PM		1.1		
	1/18/1990 13:38 PM		Plant off line underfrequency / undervoltage targets - operations.		Wallowa Falls	1/18/1990 15:20 PM		1.1		
	1/28/1990 08:25:00 PM		Plant off line, undervoltage / underfrequency and station service.		Wallowa Falls	1/28/1990 13:15 PM		1.1		
	3/21/1990 15:15 PM		Plant off line due to CB 4W12 operation.		Wallowa Falls	3/22/1990 17:30 PM		1.1		
	5/11/1990 15:15 PM		Plant down, forebay water level, station service and undervoltage / underfrequency alarms.		Wallowa Falls	5/12/1990 15:50 PM		1.1		
	6/18/1990 time unknown		Plant off line - unknown cause and duration.		Wallowa Falls	6/18/1990 10:40:00 AM		1.1		
	7/15/1990 time unknown		Plant off line - unknown cause and duration.		Wallowa Falls	7/15/1990 12:35:00 AM		1.1		
	7/23/1990 07:30:00 AM		Plant off line, lighting storm.		Wallowa Falls	7/23/1990 12:57:00 PM		1.1		
	7/29/1990 11:10:00 AM		Off line undervoltage/frequency.		Wallowa Falls	7/29/1990 12:13:00 AM		1.1		
	8/17/1990 11:20:00 AM		Plant down undervoltage/frequency.		Wallowa Falls	8/17/1990 12:40:00 PM		1.1		
	10/20/1990 10:05:00 AM		Plant down Gov oil pressure and undervoltage/frequency.		Wallowa Falls	10/29/1990 10:45:00 AM		1.1		
	10/23/1990 time unknown		Broken bucket		Wallowa Falls	10/31/1990 time unknown		1.1		
	11/13/1990 10:55:00 AM		Plant off line, forebay water level, undervoltage/frequency.		Wallowa Falls	11/13/1990 02:15:00 PM		1.1		
	12/4/1990 07:15:00 AM		Plant down, forebay, station service and undervoltage / underfrequency alarms.		Wallowa Falls	12/5/1990 03:04:00 PM		1.1		
	12/18/1990 09:00:00 AM		Plant down forebay water level, undervoltage/frequency.		Wallowa Falls	date and time unknown		1.1		
	12/19/1990 05:00:00 PM		Gen. off forebay up to remove cover to thaw ice.		Wallowa Falls	12/19/1990 12:50:00 AM		1.1		
	1/6/1991 01:30:00 PM		Plant down targets forebay water level, undervoltage/frequency.		Wallowa Falls	1/6/1991 02:30:00 PM		1.1		
	1/17/1991 06:00:00 PM		Plant down, targets undervoltage/frequency and forebay.		Wallowa Falls	1/17/1991 05:55:00 PM		1.1		
	1/27/1991 04:45:00 PM		Plant off targets forebay water level, undervoltage/frequency.		Wallowa Falls	1/27/1991 05:30:00 PM		1.1		
	2/13/1991 11:10:00 AM		Plant off line alarms station services, undervoltage/frequency forebay level.		Wallowa Falls	2/13/1990 12:00:00 PM		1.1		
	3/4/1991 11:45:00 AM		Plant off line, station service, undervoltage/frequency forebay level.		Wallowa Falls	3/4/1991 12:38:00 PM		1.1		
	3/18/1991 11:15:00 AM		Plant tripped due to low forebay.		Wallowa Falls	3/18/1991 12:00:00 PM		1.1		
	5/4/1991 06:15:00 AM		Gen off line, targets gov oil pressure, forebay water level, undervoltage/frequency.		Wallowa Falls	5/4/1991 07:38:00 AM		1.1		
	5/9/1991 10:20:00 AM		Gen shut down.		Wallowa Falls	5/9/1991 01:50:00 PM		1.1		
	5/23/1991 08:30:00 AM		Shut down to drain pipe for valve replacement.		Wallowa Falls	5/23/1991 07:30:00 PM		1.1		
	6/10/1991 05:58:00 AM		Plant off line due to switching at hurricane sub.		Wallowa Falls	6/10/1991 05:58:00 AM		1.1		
	6/11/1991 10:00:00 AM		Plant off line due to lightning.		Wallowa Falls	6/11/1991 11:31:00 AM		1.1		
	6/14/1991 06:00:00 AM		Plant down due to switching.		Wallowa Falls	6/14/1991 06:45:00 AM		1.1		
	6/14/1991 02:00:00 PM		plant off due to bad transformer.		Wallowa Falls	6/14/1991 02:45:00 PM		1.1		
	6/17/1991 04:45:00 AM		Plant down forebay water level, undervoltage/frequency.		Wallowa Falls	6/17/1991 02:00:00 PM		1.1		
	6/25/1991 02:30:00 PM		Plant down low water.		Wallowa Falls	6/26/1991 11:00:00 AM		1.1		
	7/10/1991 05:45:00 PM		Off line due to blue Mt line oper.		Wallowa Falls	7/10/1991 06:35:00 PM		1.1		

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	8/22/1991 09:35:00 PM		Plant down station service, undervoltage/frequency.		Wallowa Falls	8/23/1991 11:05:00 AM		1.1		
	10/3/1991 09:00:00 AM		Plant off line, add oil to generator bearing.		Wallowa Falls	10/3/1991 10:06:00 AM		1.1		
	10/16/1991 05:00:00 PM		Plant down - unknown cause.		Wallowa Falls	10/16/1991 05:00:00 PM		1.1		
	12/27/1991 12:45:00 PM		Plant down - unknown cause.		Wallowa Falls	12/27/1991 01:50:00 PM		1.1		
	1/31/1992 08:15:00 AM		Plant off line due to trouble on 20KV.		Wallowa Falls	1/31/1992 09:15:00 AM		1.1		
	2/3/1992 11:43:00 AM		Plant off line due to trouble on 20KV.		Wallowa Falls	2/3/1991 12:45:00 PM		1.1		
	2/13/1992 11:30:00 AM		Plant off line due to trouble on 20KV.		Wallowa Falls	2/13/1992 12:45:00 PM		1.1		
	3/2/1992 01:00:00 PM		Plant down - unknown cause.		Wallowa Falls	3/2/1992 02:30:00 PM		1.1		
	3/26/1992 10:00:00 AM		Plant down clean exciter.		Wallowa Falls	3/26/1992 04:15:00 PM		1.1		
	4/1/1992 time unknown		Plant down targets forebay water level, undervoltage/frequency.		Wallowa Falls	4/1/1992 01:28:00 PM		1.1		
	4/21/1992 02:10:00 PM		Plant down.		Wallowa Falls	4/30/1992 03:45:00 PM		1.1		
	4/30/1992 time unknown		Tripped back off reverse power.		Wallowa Falls	4/30/1992 04:30:00 PM		1.1		
	5/19/1992 12:00:00 AM		Plant down - unknown cause.		Wallowa Falls	5/22/1992 01:00:00 PM		1.1		
	5/29/1992 03:00:00 PM		Plant off forebay water level.		Wallowa Falls	6/4/1992 03:35:00 AM		1.1		
	6/8/1992 04:45:00 PM		Gen off line, targets gov oil pressure, forebay water level, undervoltage/frequency.		Wallowa Falls	6/8/1992 05:30:00 PM		1.1		
	6/21/1992 01:00:00 PM		Plant down, undervoltage/frequency.		Wallowa Falls	6/21/1992 04:00:00 PM		1.1		
	6/24/1992 12:30:00 PM		Plant down undervoltage/frequency.		Wallowa Falls	6/24/1992 01:30:00 PM		1.1		
	6/30/1992 02:15:00 PM		Gen. off line.		Wallowa Falls	6/30/1992 03:08:00 PM		1.1		
	7/7/1992 01:33:00 PM		Hydro restart undervoltage alarm gov oil pressure.		Wallowa Falls	7/7/1992 time unknown		1.1		
	7/20/1992 09:45:00 AM		Gen off line, Jones backhoe doing oregon PUC stuff.		Wallowa Falls	7/20/1992 12:38:00 PM		1.1		
	9/11/1992 05:10:00 PM		Plant down - unknown cause.		Wallowa Falls	9/14/1992 01:42:00 PM		1.1		
	10/2/1992 10:25:00 AM		Plant down.		Wallowa Falls	date and time unknown		1.1		
	10/2/1992 01:35:00 PM		Gen down, gov oil, undervoltage/frequency.		Wallowa Falls	10/2/1992 03:10:00 PM		1.1		
	10/14/1992 12:30:00 PM		Gen down - unknown cause and duration.		Wallowa Falls	10/14/1992 12:55:00 PM		1.1		
	11/23/1992 01:00:00 PM		Gen off line, lost St. service.		Wallowa Falls	11/23/1992 01:55:00 PM		1.1		
	12/16/1992 04:10:00 PM		Gen off line ss target sec inspection.		Wallowa Falls	12/16/1992 04:40:00 PM		1.1		
	12/28/1992 12:45:00 PM		Gen off, frozen wheel.		Wallowa Falls	1/19/1993 03:30:00 PM		1.1		
	1/20/1993 02:57:00 PM		Gen off line.		Wallowa Falls	1/20/1993 03:40:00 PM		1.1		
	2/19/1993 10:15:00 AM		Plant down reverse power alarm.		Wallowa Falls	2/22/1993 04:45:00 PM		1.1		
	3/22/1993 09:00:00 AM		Plant down - unknown cause.		Wallowa Falls	3/22/1993 01:45:00 PM		1.1		
	3/30/1993 08:10:00 PM		Plant down - unknown cause.		Wallowa Falls	3/31/1993 02:00:00 PM		1.1		
	4/27/1993 12:00:00 PM		Plant down - inspection.		Wallowa Falls	4/27/1993 12:50:00 PM		1.1		
	5/17/1993 01:15:00 PM		Gen. down, target, gov oil.		Wallowa Falls	5/18/1993 01:00:00 PM		1.1		
	6/2/1993 12:00:00 PM		Plant down - unknown cause		Wallowa Falls	6/2/1993 01:15:00 PM		1.1		
	6/9/1993 02:15:00 PM		Gen off line, security inspection.		Wallowa Falls	6/9/1993 03:10:00 PM		1.1		
	6/10/1993 12:00:00 PM		Gen off line, warming up add oil		Wallowa Falls	6/10/1993 01:00:00 PM		1.1		
	6/15/1993 07:45:00 AM		Gen off, gov oil pressure , target, water level and Under voltage/frequency.		Wallowa Falls	6/15/1993 08:50:00 AM		1.1		
	6/16/1993 05:10:00 PM		Gen off, gov oil pressure , target, water level and Under voltage/frequency.		Wallowa Falls	6/16/1993 05:58:00 PM		1.1		
	6/17/1993 08:00:00 AM		Gen off, gov oil pressure , target, water level and Under voltage/frequency.		Wallowa Falls	6/17/1993 09:10:00 AM		1.1		
	12/10/1993 06:00:00 PM		Plant down water spilling.		Wallowa Falls	12/10/1993 time unknown		1.1		
	12/21/1993 time unknown		Hazlett closed head gate.		Wallowa Falls	3/8/1994 time unknown		1.1		
	3/15/1994 09:40:00 AM		Plant down, no alarm.		Wallowa Falls	3/15/1994 10:00:00 AM		1.1		
	3/22/1994 04:40:00 PM		Plant down - oil in pit.		Wallowa Falls	3/23/1994 03:25:00 PM		1.1		
	5/17/1994 12:20:00 PM		Plant off till repairs made - unknow cause.		Wallowa Falls	5/18/1994 03:10:00 PM		1.1		
	5/26/1994 04:30:00 PM		Plant tripped - replace water valve.		Wallowa Falls	5/26/1994 11:45:00 AM		1.1		
	6/1/1994 11:30:00 AM		Took plant off line - valve problem.		Wallowa Falls	date and time unknown		1.1		
	6/11/1994 time unknown		Close headgate for needle valve problem & problem with tailrace walls.		Wallowa Falls	6/16/1994 time unknown		1.1		

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	6/24/1994 03:45:00 PM		Plant off, forebay water level, under voltage and frequency.		Wallowa Falls	6/27/1994 04:20:00 PM		1.1		
	6/29/1994 12:20:00 PM		Gen down.		Wallowa Falls	6/30/1994 01:40:00 PM		1.1		
	7/12/1994 time unknown		Back on line - unknown cause and duration.		Wallowa Falls	7/12/1994 12:30:00 PM		1.1		
	7/14/1994 06:00:00 PM		Back on line - unknown cause and duration.		Wallowa Falls	7/14/1994 06:00:00 PM		1.1		
	7/25/1994 01:30:00 PM		Back on line - unknown cause and duration.		Wallowa Falls	7/25/1994 01:30:00 PM		1.1		
	7/25/1994 02:30:00 PM		Plant down, under voltage/frequency, station service, forebay.		Wallowa Falls	7/26/1994 12:30:00 PM		1.1		
	8/3/1994 11:00:00 AM		Back on line - unknown cause and duration.		Wallowa Falls	8/3/1994 11:00:00 AM		1.1		
	8/10/1994 11:00:00 AM		Back on line - unknown cause and duration.		Wallowa Falls	8/10/1994 11:00:00 AM		1.1		
	8/11/1994 09:30:00 AM		Back on line - unknown cause and duration.		Wallowa Falls	8/11/1994 09:30:00 AM		1.1		
	8/12/1994 05:15:00 PM		Gen tripped.		Wallowa Falls	8/15/1994 11:30:00 AM		1.1		
	9/3/1994 10:00:00 AM		Plant down, under voltage/frequency, station service, forebay		Wallowa Falls	9/5/1994 01:00:00 PM		1.1		
	11/1/1994 01:45:00 PM		Gen down, undervoltage/frequency water level, alarms		Wallowa Falls	11/1/1994 04:01:00 PM		1.1		
	11/3/1994 01:00:00 PM		Plant down, loss ss.		Wallowa Falls	11/3/1994 03:00:00 PM		1.1		
	11/14/1994 time unknown		Plant down - unknown cause.		Wallowa Falls	11/14/1994 12:00:00 PM		1.1		
	12/7/1994 02:00:00 PM		Plant offline, under voltage and frequency.		Wallowa Falls	12/7/1994 07:30:00 PM		1.1		
	12/20/1994 time unknown		Plant down - unknown cause.		Wallowa Falls	12/20/1994 06:40:00 PM		1.1		
	1/18/1995 time unknown		Plant down - unknown cause.		Wallowa Falls	1/18/1995 12:00:00 PM		1.1		
	3/8/1995 11:00:00 AM		Plant down - unknown cause.		Wallowa Falls	3/8/1995 04:30:00 PM		1.1		
	3/13/1995 time unknown		Plant down - unknown cause.		Wallowa Falls	3/13/1995 01:00:00 PM		1.1		
	3/16/1995 time unknown		Plant down - unknown cause.		Wallowa Falls	3/16/1995 03:30:00 PM		1.1		
	3/9/1995 time unknown		Plant down - unknown cause.		Wallowa Falls	3/9/1995 02:30:00 PM		1.1		
	5/11/1995 time unknown		Plant down - unknown cause.		Wallowa Falls	5/11/1995 11:30:00 AM		1.1		
	6/1/1995 time unknown		Closed headgate. Penstock slip joint broke.		Wallowa Falls	6/23/1995 time unknown		1.1		
	6/7/1995 09:30:00 AM		Plant off - switching out.		Wallowa Falls	6/23/1995 10:00:00 AM		1.1		
	7/3/1995 09:33:00 AM		Plant off line - unknown cause.		Wallowa Falls	7/3/1995 10:11:00 AM		1.1		
	7/6/1995 08:00:00 PM		Shut off power.		Wallowa Falls	7/10/1995 04:00:00 PM		1.1		
	7/26/1995 03:30:00 PM		Plant off - unknown cause.		Wallowa Falls	7/27/1995 12:20:00 PM		1.1		
	9/11/1996 time unknown		Williams to forebay to drain.		Wallowa Falls	9/12/1996 11:00:00 AM		1.1		
	9/11/1996 03:30:00 PM		Plant off line due to low water.		Wallowa Falls	9/12/1996 11:00:00 AM		1.1		
	9/12/1996 02:30:00 PM		Gen off line, packing collar heating up.		Wallowa Falls	9/17/1996 07:16:00 AM		1.1		
	9/17/1996 11:26:00 AM		Gen is off line due to packing gland heating		Wallowa Falls	9/18/1996 12:52:00 PM		1.1		
	9/18/1996 15:06 PM		Gen off line due to nozzle closure, Penstock break.		Wallowa Falls	date and time unknown		1.1		
	12/12/1996 time unknown		Drain penstock, due to HPU not working. Penstock frozen for winter.		Wallowa Falls	5/15/1997 time unknown		1.1		
	6/16/1997 time unknown		Headgate closed. Limb in nozzle.		Wallowa Falls	6/18/1997 11:50:00 AM		1.1		
	6/26/1997 07:00:00 AM		Gen off line.		Wallowa Falls	6/27/1997 02:40:00 PM		1.1		
	6/30/1997 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	6/30/1997 02:50:00 PM		1.1		
	7/1/1997 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	7/1/1997 10:00:00 AM		1.1		
	7/4/1997 06:30:00 PM		Plant off line - no paper in printer.		Wallowa Falls	7/7/1997 06:15:00 PM		1.1		
	7/18/1997 07:50:00 AM		Took unit off line.		Wallowa Falls	7/18/1997 12:15:00 PM		1.1		
	7/22/1997 09:15:00 AM		off line, lightening storm.		Wallowa Falls	7/22/1997 time unknown		1.1		
	7/23/1997 09:30:00 AM		Plant down ex fan breaker won't hold.		Wallowa Falls	7/24/1997 10:32:00 AM		1.1		
	8/5/1997 03:15:00 PM		Plant off line over frequency target.		Wallowa Falls	8/5/1997 time unknown		1.1		
	8/6/1997 01:00:00 PM		Plant down.		Wallowa Falls	8/6/1997 time unknown		1.1		
	9/10/1997 07:30:00 AM		Plant down - clean under voltage target relay.		Wallowa Falls	9/10/1997 time unknown		1.1		
	9/11/1997 12:00:00 AM		Plant down until water clears up.		Wallowa Falls	9/12/1997 09:30:00 AM		1.1		
	9/17/1997 time unknown		Plant off no targets mech. Lockout trip.		Wallowa Falls	9/17/1997 08:35:00 AM		1.1		
	9/18/1997 time unknown		Plant off Under voltage target and volts on net target.		Wallowa Falls	9/18/1997 03:30:00 PM		1.1		
	10/2/1997 03:00:00 PM		Plant down - no water, cleaned line to pressure switch, installed new pressure.		Wallowa Falls	10/3/1997 05:30:00 PM		1.1		
	10/11/1997 10:30:00 PM		Plant down undervoltage mech. Lockout.		Wallowa Falls	10/11/97 time unknown		1.1		

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
	10/15/1997 time unknown		Broken bucket		Wallowa Falls	date and time unknown		1.1		
	10/15/1997 03:00:00 PM		Took plant off line - wheel broken off.		Wallowa Falls	date and time unknown		1.1		
	5/7/1998 02:30:00 PM		Closed headgate.		Wallowa Falls	date and time unknown		1.1		
	5/26/1998 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	5/30/1998 10:00:00 AM		1.1		
	6/3/1998 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	6/3/1998 10:40:00 AM		1.1		
	6/5/1998 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	6/5/1998 03:40:00 PM		1.1		
	6/15/1998 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	6/15/1998 09:45:00 AM		1.1		
	6/23/1998 05:10:00 PM		Plant down, battery charger alarm.		Wallowa Falls	6/30/1998 07:30:00 AM		1.1		
	7/2/1998 01:45:00 PM		Plant down, reset battery.		Wallowa Falls	7/14/1998 03:10:00 PM		1.1		
	7/29/1998 time unknown		Plant down, no water, fill penstock & restart.		Wallowa Falls	date and time unknown		1.1		
	7/29/1998 02:30:00 PM		Plant down no water, mech. And electric lockout.		Wallowa Falls	7/29/1998 time unknown		1.1		
	7/31/1998 09:00:00 AM		Plant down, battery charger problem.		Wallowa Falls	8/5/1998 05:35:00 PM		1.1		
	8/24/1998 time unknown		Plant off line, mech. And electric lockout under voltage and over target.		Wallowa Falls	8/24/1998 10:20:00 AM		1.1		
	8/26/1998 time unknown		Plant off under voltage mech lockout - restart.		Wallowa Falls	8/26/1998 07:45:00 PM		1.1		
	8/26/1998 time unknown		Plant off under voltage /frequency mech lockout - restart.		Wallowa Falls	8/26/1998 10:00:00 PM		1.1		
	8/31/1998 10:20:00 AM		Plant off line under voltage, target elec. Mech. Lockout.		Wallowa Falls	9/1/1998 10:00:00 AM		1.1		
	9/3/1998 07:30:00 AM		Took unit off line to work on the bypass valve at the forebay.		Wallowa Falls	9/3/1998 11:58:00 AM		1.1		
	9/13/1998 time unknown		off line, cleared targets mechanical electrical lockout.		Wallowa Falls	9/13/1998 06:20:00 PM		1.1		
	10/2/1998 time unknown		Plant down, over volts, Under voltage targets mech. Lockout.		Wallowa Falls	10/2/1998 09:30:00 AM		1.1		
	11/2/1998 time unknown		Plant down, over volts, Under voltage targets mech. Lockout.		Wallowa Falls	11/2/1998 05:45:00 PM		1.1		
	11/7/1998 time unknown		Plant down trip bearing temp, mech lockout, ac breaker fan tripped.		Wallowa Falls	11/10/1998 03:10:00 PM		1.1		
	11/12/1998 04:30:00 PM		Plant down, AC breaker fan tripped.		Wallowa Falls	12/23/1998 03:30:00 PM		1.1		
	12/25/1998 time unknown		Plant flooded due to broken water line.		Wallowa Falls	date and time unknown		1.1		
	1/14/1999 time unknown		Williams removed 2x4 from nozzle, headgate had to be closed.		Wallowa Falls	1/14/1999 01:25:00 PM		1.1		
	1/18/1999 time unknown		Plant off line, Mech lockout.		Wallowa Falls	1/18/1999 03:30:00 AM		1.1		
	1/30/1999 time unknown		Plant down, under voltage/frequency, lockout wind storm.		Wallowa Falls	1/30/1999 08:30:00 AM		1.1		
	2/2/1999 time unknown		Plant down, mech and elcec lockouts rest.		Wallowa Falls	2/2/1999 07:45:00 PM		1.1		
	2/4/1999 10:00:00 AM		Shut plant down - no water.		Wallowa Falls	2/4/1999 03:30:00 PM		1.1		
	3/3/1999 time unknown		Plant down, Under voltage target mech. Lockout.		Wallowa Falls	3/3/1999 10:00:00 AM		1.1		
	6/17/1999 12:00:00 AM		Plant down, mech lockout no targets breaker will not close.		Wallowa Falls	6/18/1999 09:00:00 AM		1.1		
	6/21/1999 01:45:00 PM		Plant down, under voltage, no watt low light, need filter changed.		Wallowa Falls	6/22/1999 08:50:00 AM		1.1		
	7/11/1999 05:20:00 PM		Plant off line - unknown cause.		Wallowa Falls	7/11/1999 05:40:00 PM		1.1		
	7/12/1999 05:00:00 PM		Plant down, bearing temp need fan.		Wallowa Falls	7/12/1999 08:00:00 PM		1.1		
	7/15/1999 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	7/15/1999 09:45:00 AM		1.1		
	7/21/1999 04:00:00 PM		Plant down, ac breaker.		Wallowa Falls	8/3/1999 01:00:00 PM		1.1		
	8/7/1999 12:56:00 PM		Plant down - unknown cause.		Wallowa Falls	8/10/1999 03:00:00 PM		1.1		
	9/20/1999 02:00:00 PM		Plant down under voltage, feeder op found leak.		Wallowa Falls	9/23/1999 07:25:00 AM		1.1		
	9/27/1999 12:07:00 AM		Plant down - unknown cause.		Wallowa Falls	11/17/1999 07:00:00 AM		1.1		
	9/27/1999 10:45:00 AM		Closed headgate. Penstock broken at trestle.		Wallowa Falls	date and time unknown		1.1		
	10/21/1999		Fill Penstock, found broken wheel part in tailrace.		Wallowa Falls	date and time unknown		1.1		

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
	10/25/1999		Found penstock pulled apart at lower trestle. No mention of headgate, must have closed.		Wallowa Falls	date and time unknown		1.1		
	11/10/1999		Fill penstock, start plant.		Wallowa Falls	date and time unknown		1.1		
	11/15/1999		Removed rocks from needle valve. Headgate had to be closed.		Wallowa Falls	date and time unknown		1.1		
	11/16/1999		Fill penstock, start plant, shutdown, more rocks.		Wallowa Falls	date and time unknown		1.1		
	11/17/1999		Flush penstock, fill & start plant.		Wallowa Falls	date and time unknown		1.1		
	1/9/2000 9:00:00 PM		Plant down, no water, fill penstock.		Wallowa Falls	1/10/2000 02:00:00 AM		1.1		
	1/16/2000 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	1/17/2000 10:15:00 AM		1.1		
	1/19/2000 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	1/19/2000 08:10:00 PM		1.1		
	2/3/2000 time unknown		Plant down, under voltage - unknown duration.		Wallowa Falls	2/3/2000 02:20:00 PM		1.1		
	3/20/2000 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	3/20/2000 07:15:00 AM		1.1		
	4/13/2000 02:00:00 AM		Plant down, loss of field target.		Wallowa Falls	5/10/2000 07:00:00 PM		1.1		
	5/12/2000 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	5/12/2000 05:30:00 PM		1.1		
	5/16/2000 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	5/16/2000 08:30:00 PM		1.1		
	5/17/2000 12:50:00 PM		Plant down repair vent fan.		Wallowa Falls	5/17/2000 03:20:00 PM		1.1		
	5/21/2000 time unknown		Plant down bearing temp under frequency.		Wallowa Falls	5/21/2000 04:45:00 PM		1.1		
	5/31/2000 07:54:00 AM		Plant off line for headgate control work.		Wallowa Falls	5/31/2000 08:34:00 PM		1.1		
	6/19/2000 04:10:00 AM		Plant down forebay near full.		Wallowa Falls	6/20/2000 08:45:00 PM		1.1		
	7/5/2000 time unknown		Plant down under voltage, off targets.		Wallowa Falls	7/5/2000 01:35:00 PM		1.1		
	7/7/2000 time unknown		Plant down reset targets UV.		Wallowa Falls	7/7/2000 06:13:00 PM		1.1		
	7/8/2000 06:00:00 PM		Plant down water pressure.		Wallowa Falls	8/9/2000 08:00:00 AM		1.1		
	9/1/2000 01:10:00 PM		Plant down under voltage target, breaker won't close.		Wallowa Falls	9/13/2000 08:15:00 AM		1.1		
	11/4/2000 time unknown		Plant down under voltage target.		Wallowa Falls	11/4/2000 09:20:00 AM		1.1		
	11/15/2000 time unknown		Plant down no targets, line fuse blew.		Wallowa Falls	11/15/2000 02:50:00 PM		1.1		
	12/14/2000 time unknown		Plant down under voltage/frequency target.		Wallowa Falls	12/14/00 10:00 AM		1.1		
	12/15/2000 time unknown		Plant down - unknown cause and duration.		Wallowa Falls	12/15/00 11:05 AM		1.1		
77	1/12/2001 12:52:28 AM	70XX - Turbine	Unit tripped on bearing temp monitor.	Actual	Wallowa Falls	1/12/2001 02:00:00 AM		1.1	1.1256	1.24
153	2/19/2001 05:25:00 PM	93XX - External Problems	Undervoltage and overcurrent relays.	Actual	Wallowa Falls	2/19/2001 06:05:00 PM		1.1	.6667	.73
192	3/6/2001 08:26:00 PM	93XX - External Problems	CB 6W101 tripped.	Actual	Wallowa Falls	3/6/2001 09:00:00 PM		1.1	.5667	.62
187	3/10/2001 06:50:00 PM	93XX - External Problems	69 KV relayed & reclosed, unknown cause.	Actual	Wallowa Falls	3/10/2001 08:20:00 PM		1.1	1.5	1.65
212	3/21/2001 05:32:00 AM	38XX - Auxiliary Systems	Tripped on low oil pressure, oil level is good.	Actual	Wallowa Falls	3/21/2001 06:35:00 AM		1.1	1.05	1.16
225	3/31/2001 10:30:33 AM	93XX - External Problems	Reset undervoltage relays, bump on the line again.	Actual	Wallowa Falls	3/31/2001 11:05:00 AM		1.1	.5742	.63
264	4/24/2001 04:10:00 PM	93XX - External Problems	CB 6W101 tripped. No problems.	Actual	Wallowa Falls	4/25/2001 09:30:00 AM		1.1	17.3333	19.07
265	4/25/2001 05:18:00 PM	93XX - External Problems	CB 6W101 tripped. No problems.	Actual	Wallowa Falls	4/26/2001 09:26:00 AM		1.1	16.1333	17.75
280	5/2/2001 11:15:00 AM	93XX - External Problems	Undervoltage relay reset. Bump in the line caused trip.	Actual	Wallowa Falls	5/2/2001 01:50:00 PM		1.1	2.5833	2.84
300	5/11/2001 01:40:00 PM	38XX - Auxiliary Systems	Building temperature too high.	Actual	Wallowa Falls	5/11/2001 03:40:00 PM		1.1	2.	2.2

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
303	5/15/2001 11:34:00 AM	71XX - Water Delivery System	Portion of penstock has fallen over. Unit off line pending trestle repair.	Actual	Wallowa Falls	6/2/2001 11:32:00 AM		1.1	431.9667	475.16
417	6/30/2001 04:37:00 PM	38XX - Auxiliary Systems	Unit tripped, hot weather.	Actual	Wallowa Falls	6/30/2001 05:39:00 PM		1.1	1.0333	1.14
418	7/1/2001 04:04:00 PM	70XX - Turbine	Unit tripped, hot weather.	Actual	Wallowa Falls	7/1/2001 04:49:00 PM		1.1	.75	.83
421	7/2/2001 01:39:13 PM	38XX - Auxiliary Systems	Unit tripped, hot weather.	Actual	Wallowa Falls	7/2/2001 03:13:00 PM		1.1	1.5631	1.72
426	7/3/2001 03:20:00 PM	70XX - Turbine	High bearing temperature.	Actual	Wallowa Falls	7/3/2001 04:30:00 PM		1.1	1.1667	1.28
428	7/4/2001 12:54:55 PM	70XX - Turbine	Thunderstorm came through. Lightning.	Actual	Wallowa Falls	7/4/2001 03:30:00 PM		1.1	2.5847	2.84
431	7/4/2001 07:48:00 PM	39XX - Controls/Communication	Headgate may be closed, will check in morning. Storm blew out solenoid on headgate.	Actual	Wallowa Falls	7/5/2001 12:00:00 PM		1.1	16.2	17.82
432	7/6/2001 07:23:00 AM	93XX - External Problems	Bump on the 69 line took it off.	Actual	Wallowa Falls	7/6/2001 10:23:00 AM		1.1	3.	3.3
434	7/9/2001 04:00:00 PM	93XX - External Problems	Undervoltage relay, another bump.	Actual	Wallowa Falls	7/9/2001 04:55:00 PM		1.1	.9167	1.01
437	7/11/2001 09:40:00 PM	93XX - External Problems	Bump on the system.	Actual	Wallowa Falls	7/11/2001 10:45:00 PM		1.1	1.0833	1.19
495	7/31/2001 01:31:00 PM	93XX - External Problems	Undervoltage relay trip. Fault on the line.	Actual	Wallowa Falls	7/31/2001 02:30:00 PM		1.1	.9833	1.08
499	8/1/2001 12:19:00 PM	38XX - Auxiliary Systems	Bearing oil indicator is empty.	Actual	Wallowa Falls	10/30/2001 12:35:00 PM		1.1	2160.2667	2,376.29
688	11/15/2001 08:10:00 AM	45XX - Generator/Exciter	New Turbine bearing oil leak; had to shut down unit to clean up. In log on 11/14.	Actual	Wallowa Falls	11/28/2001 09:00:00 AM		1.1	312.8333	344.12
743	12/1/2001 08:25:00 AM	93XX - External Problems	Plant trip. Back on line.	Actual	Wallowa Falls	12/1/2001 10:40:00 AM		1.1	2.25	2.48
744	12/1/2001 06:35:00 PM	93XX - External Problems	Plant tripped again.	Actual	Wallowa Falls	12/3/2001 07:00:00 AM		1.1	36.4167	40.06
749	12/16/2001 07:45:00 PM	93XX - External Problems	Tree limb on line blew line fuses.	Actual	Wallowa Falls	12/16/2001 09:45:00 PM		1.1	2.	2.2
750	12/17/2001 05:45:00 PM	93XX - External Problems	Possible line bump.	Actual	Wallowa Falls	12/17/2001 07:07:00 PM		1.1	1.3667	1.5
759	12/21/2001 05:05:00 PM	71XX - Water Delivery System	Freezing temperature, just a trickle of water coming down. 2300, headgate closed, reason unknown.	Actual	Wallowa Falls	3/31/2002 11:59:00 PM		1.1	2406.9	2,647.59
861	4/1/2002 12:00:00 AM	71XX - Water Delivery System	Off line head gate out of service.	Actual	Wallowa Falls	5/22/2002 03:10:00 PM		1.1	1239.1667	1,363.08
950	5/23/2002 04:00:46 PM	93XX - External Problems	Line bump due to car/pole accident.	Actual	Wallowa Falls	5/23/2002 05:15:00 PM		1.1	1.2372	1.36

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
951	5/24/2002 01:31:00 PM	70XX - Turbine	Unit tripped of on high bearing temperature.	Actual	Wallowa Falls	5/24/2002 09:40:00 PM		1.1	8.15	8.97
952	5/29/2002 03:21:00 PM	38XX - Auxiliary Systems	Suspected building heating problems. Has fan on order.	Actual	Wallowa Falls	5/29/2002 05:30:00 PM		1.1	2.15	2.37
953	5/29/2002 11:13:00 PM	70XX - Turbine	Unit trip, have service restored in AM.	Actual	Wallowa Falls	5/30/2002 07:58:00 AM		1.1	8.75	9.63
954	6/2/2002 01:52:00 PM	38XX - Auxiliary Systems	Building temperature too high.	Actual	Wallowa Falls	6/2/2002 02:45:00 PM		1.1	.8833	.97
955	6/3/2002 03:08:00 PM	38XX - Auxiliary Systems	Circuit breaker trip. Building still too hot.	Actual	Wallowa Falls	6/3/2002 03:40:00 PM		1.1	.5333	.59
956	6/4/2002 01:00:00 PM	71XX - Water Delivery System	Overheating problem again.	Actual	Wallowa Falls	6/4/2002 03:50:00 PM		1.1	2.8333	3.12
963	6/6/2002 01:50:00 PM	71XX - Water Delivery System	Unit trip phone alarm.	Actual	Wallowa Falls	6/6/2002 03:20:00 PM		1.1	1.5	1.65
996	6/23/2002 03:04:00 PM	93XX - External Problems	Unit trip off line alarm.	Actual	Wallowa Falls	6/24/2002 03:25:00 PM		1.1	24.35	26.79
1028	7/10/2002 04:19:00 PM	45XX - Generator/Exciter	No targets and annunciator out of paper. He suspects unit tripped on bearing temperature due to heat wave.	Actual	Wallowa Falls	7/11/2002 12:00:00 PM		1.1	19.6833	21.65
1047	7/11/2002 05:36:00 PM	45XX - Generator/Exciter	off line, unknown cause.	Actual	Wallowa Falls	7/18/2002 08:30:00 PM		1.1	170.9	187.99
1100	8/16/2002 01:40:00 PM	70XX - Turbine	Gen. pit half full of water from leakage. Not sure where leak is, Dan Weisser said to close headgate. Water has reached windings on gen. George to get pump and removed water from gen. pit, also will turn fans on toward windings. Gen. breaker will be racked out.	Actual	Wallowa Falls	8/21/2002 12:50:00 PM		1.1	119.1667	131.08
1101	8/21/2002 01:55:00 PM	36XX - Electrical Systems	Stick removed from nozzle. Will try to put unit back online. Unit voltage problems.	Actual	Wallowa Falls	8/28/2002 02:17:00 PM		1.1	168.3667	185.2
1103	8/29/2002 03:00:00 PM	93XX - External Problems	Bump in the system.	Actual	Wallowa Falls	8/29/2002 04:15:00 PM		1.1	1.25	1.38
1104	8/30/2002 07:32:00 PM	93XX - External Problems	Plant trip, lightening caused.	Actual	Wallowa Falls	8/30/2002 09:20:00 PM		1.1	1.8	1.98
1142	9/14/2002 02:40:00 PM	70XX - Turbine	Unit off line.	Actual	Wallowa Falls	9/16/2002 02:15:00 PM		1.1	47.5833	52.34
1144	9/19/2002 09:39:00 PM	93XX - External Problems	Unit trip off line alarm.	Actual	Wallowa Falls	9/20/2002 12:35:00 AM		1.1	2.9333	3.23
1176	10/8/2002 03:31:00 PM	93XX - External Problems	Cause was BPA line interruption.	Actual	Wallowa Falls	10/8/2002 04:30:00 PM		1.1	.9833	1.08
1219	10/18/2002 06:30:00 AM	93XX - External Problems	Under voltage and under frequency relays trip. Line took a bump.	Actual	Wallowa Falls	10/18/2002 11:15:00 AM		1.1	4.75	5.23
1242	10/31/2002 12:05:00 AM	93XX - External Problems	Undervoltage target, bump on the line.	Actual	Wallowa Falls	10/31/2002 01:00:00 AM		1.1	.9167	1.01

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
1264	11/25/2002 01:50:00 AM	39XX - Controls/Communication	Unit back on line, unknown cause.	Actual	Wallowa Falls	11/25/2002 01:35:00 PM		1.1	11.75	12.93
1265	11/25/2002 01:50:10 AM	93XX - External Problems	unit back on line, unknown cause.	Actual	Wallowa Falls	11/25/2002 01:35:00 PM		1.1	11.7472	12.92
1267	12/7/2002 07:20:00 AM	71XX - Water Delivery System	Begin draining penstock to remove obstruction from nozzle. It will be awhile. Removed a piece of wood about 6" long and 4" wide at one end.	Actual	Wallowa Falls	12/7/2002 11:30:00 AM		1.1	4.1667	4.58
1281	12/14/2002 11:10:46 AM	93XX - External Problems	Unit trip.	Actual	Wallowa Falls	12/15/2002 11:22:00 AM		1.1	24.1872	26.61
1275	12/15/2002 11:50:00 PM	93XX - External Problems	Back on line. Outage due to wind.	Actual	Wallowa Falls	12/16/2002 06:45:00 PM		1.1	18.9167	20.81
1282	12/17/2002 12:32:00 AM	71XX - Water Delivery System	Unit trip off line, will notify in AM.	Actual	Wallowa Falls	12/18/2002 04:00:00 PM		1.1	39.4667	43.41
1283	12/18/2002 05:00:00 PM	71XX - Water Delivery System	Headgate had gone closed. Changed solenoid at headgate.	Actual	Wallowa Falls	12/19/2002 10:55:00 AM		1.1	17.9167	19.71
1284	12/19/2002 11:55:00 AM	71XX - Water Delivery System	Level indication not working right.	Actual	Wallowa Falls	12/19/2002 04:25:00 PM		1.1	4.5	4.95
1287	12/26/2002 08:50:00 PM	93XX - External Problems	Tripped, Enterprise said they took a big hit last night.	Actual	Wallowa Falls	12/27/2002 10:00:00 AM		1.1	13.1667	14.48
1292	1/3/2003 07:15:00 AM	93XX - External Problems	Tripped on a feeder operation.	Actual	Wallowa Falls	1/3/2003 10:40:00 AM		1.1	3.4167	3.76
1362	2/27/2003 05:15:06 AM	93XX - External Problems	Cause was bump on the line.	Actual	Wallowa Falls	2/27/2003 09:45:00 AM		1.1	4.4983	4.95
1384	3/5/2003 06:33:25 PM	93XX - External Problems	Cause was line trouble.	Actual	Wallowa Falls	3/5/2003 07:28:00 PM		1.1	.9097	1.
1405	3/18/2003 05:30:00 PM	93XX - External Problems	Eric Walters, PCC, reports district feeder line regulator is bad and has been taken off line.	Actual	Wallowa Falls	3/21/2003 05:20:00 PM		1.1	71.8333	79.02
1451	4/12/2003 04:50:00 PM	93XX - External Problems	Unit tripped, may be lightning.	Actual	Wallowa Falls	4/12/2003 07:30:00 PM		1.1	2.6667	2.93
1455	4/13/2003 03:10:00 PM	93XX - External Problems	Unit tripped off.	Actual	Wallowa Falls	4/13/2003 04:15:00 PM		1.1	1.0833	1.19
1468	4/16/2003 08:15:00 AM	93XX - External Problems	Becker reports line bump knocked it off.	Actual	Wallowa Falls	4/16/2003 09:38:00 AM		1.1	1.3833	1.52
1480	4/24/2003 04:15:42 PM	93XX - External Problems	Unit off line alarm. Checked, all ok.	Actual	Wallowa Falls	4/25/2003 09:49:42 AM		1.1	17.5667	19.32
1487	4/28/2003 09:45:43 AM	93XX - External Problems	Unit trip.	Actual	Wallowa Falls	4/28/2003 10:48:43 AM		1.1	1.05	1.16
1491	5/1/2003 06:08:51 AM	93XX - External Problems	Unit trip.	Actual	Wallowa Falls	5/1/2003 09:37:09 AM		1.1	3.4717	3.82

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
1514	5/16/2003 07:15:22 AM	36XX - Electrical Systems	Plant trip.	Actual	Wallowa Falls	5/16/2003 12:35:21 PM		1.1	5.3331	5.87
1518	5/18/2003 04:58:12 AM	36XX - Electrical Systems	Unit trip.	Actual	Wallowa Falls	5/18/2003 08:30:12 AM		1.1	3.5333	3.89
1523	5/22/2003 05:54:59 PM	93XX - External Problems	Unit trip.	Actual	Wallowa Falls	5/23/2003 01:00:05 PM		1.1	19.085	20.99
1536	5/29/2003 11:00:27 PM	38XX - Auxiliary Systems	Unit trip.	Actual	Wallowa Falls	5/30/2003 11:35:53 AM		1.1	12.5906	13.85
1546	6/8/2003 02:00:59 PM	93XX - External Problems	Unit trip alarm.	Actual	Wallowa Falls	6/8/2003 08:20:47 PM		1.1	6.33	6.96
1563	6/18/2003 12:35:42 AM	38XX - Auxiliary Systems	George Becker reports Penstock drained from trip. Tripped on positive ground.	Actual	Wallowa Falls	6/18/2003 02:05:22 PM		1.1	13.4944	14.84
1564	6/18/2003 02:49:37 PM	38XX - Auxiliary Systems	Unit taken off line due to battery charger problems.	Actual	Wallowa Falls	7/1/2003 01:45:02 PM		1.1	310.9236	342.02
1621	7/10/2003 03:10:23 PM	38XX - Auxiliary Systems	High temp, bearing, and fan was out.	Actual	Wallowa Falls	7/10/2003 03:55:16 PM		1.1	.7481	.82
1631	7/15/2003 04:15:33 PM	70XX - Turbine	Tripped on high bearing temperature.	Actual	Wallowa Falls	7/15/2003 05:20:33 PM		1.1	1.0833	1.19
1634	7/18/2003 03:37:52 PM	93XX - External Problems	Will Mills to put plant back on line. Reported on 7/19.	Actual	Wallowa Falls	7/19/2003 09:50:52 AM		1.1	18.2167	20.04
1637	7/19/2003 05:19:00 PM	36XX - Electrical Systems	Reported outage # on 7/18 instead of 7/19.	Actual	Wallowa Falls	7/20/2003 12:03:03 PM		1.1	18.7342	20.61
1640	7/22/2003 01:55:05 PM	70XX - Turbine	Cause was bearing temp.	Actual	Wallowa Falls	7/22/2003 06:35:05 PM		1.1	4.6667	5.13
1641	7/23/2003 01:55:45 PM	38XX - Auxiliary Systems	Unit trip, back on line.	Actual	Wallowa Falls	7/23/2003 05:25:45 PM		1.1	3.5	3.85
1653	7/29/2003 01:50:08 PM	38XX - Auxiliary Systems	Unit trip, back on line. Tripped again.	Actual	Wallowa Falls	7/29/2003 02:45:08 PM		1.1	.9167	1.01
1657	7/29/2003 05:33:36 PM	38XX - Auxiliary Systems	Unit tripped, back on line.	Actual	Wallowa Falls	7/30/2003 02:30:36 PM		1.1	20.95	23.05
1656	7/29/2003 05:33:51 PM	38XX - Auxiliary Systems	Unit trip, back on line. Tripped again.	Actual	Wallowa Falls	7/30/2003 02:30:22 PM		1.1	20.9419	23.04
1662	7/31/2003 04:10:56 PM	45XX - Generator/Exciter	Went out on high temp again.	Actual	Wallowa Falls	7/31/2003 05:35:56 PM		1.1	1.4167	1.56
1718	8/1/2003 03:52:44 PM	70XX - Turbine	Unit tripped off.	Actual	Wallowa Falls	8/1/2003 04:45:44 PM		1.1	.8833	.97
1668	8/4/2003 07:12:31 PM	70XX - Turbine	Unit trip.	Actual	Wallowa Falls	8/15/2003 07:50:42 AM		1.1	252.6364	277.9
1682	8/16/2003 06:54:17 AM	93XX - External Problems	Line bump.	Actual	Wallowa Falls	8/16/2003 08:35:17 AM		1.1	1.6833	1.85
1703	8/24/2003 04:08:12 AM	93XX - External Problems	Phone message, unit trip off line.	Actual	Wallowa Falls	8/25/2003 09:45:38 AM		1.1	29.6239	32.59

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
1765	9/25/2003 02:30:13 PM	93XX - External Problems	Undervoltage.	Actual	Wallowa Falls	9/25/2003 05:30:13 PM		1.1	3.	3.3
1778	10/6/2003 11:36:00 AM	93XX - External Problems	Line trouble.	Actual	Wallowa Falls	10/6/2003 12:08:00 PM		1.1	.5333	.59
1783	10/9/2003 01:52:17 PM	93XX - External Problems	Under frequency took it off.	Actual	Wallowa Falls	10/9/2003 03:05:40 PM		1.1	1.2231	1.35
1800	10/18/2003 03:15:23 PM	93XX - External Problems	Trip.	Actual	Wallowa Falls	10/20/2003 02:10:34 PM		1.1	46.9197	51.61
1804	10/28/2003 10:30:49 PM	93XX - External Problems	Phone alarm.	Actual	Wallowa Falls	10/29/2003 06:00:59 PM		1.1	19.5028	21.45
1856	11/18/2003 03:45:21 PM	71XX - Water Delivery System	Unit trip.	Actual	Wallowa Falls	11/19/2003 01:03:13 PM		1.1	21.2978	23.43
1866	11/25/2003 10:54:51 AM	93XX - External Problems	A now deceased magpie on a transformer caused a momentary line interruption, tripping the unit.	Actual	Wallowa Falls	11/25/2003 01:20:51 PM		1.1	2.4333	2.68
1906	12/24/2003 11:00:01 AM	93XX - External Problems	Trip caused by pole fire.	Actual	Wallowa Falls	12/24/2003 12:55:01 PM		1.1	1.9167	2.11
1929	1/4/2004 12:00:03 PM	93XX - External Problems	Unit tripped.	Actual	Wallowa Falls	1/4/2004 03:26:03 PM		1.1	3.4333	3.78
1996	3/3/2004 11:24:38 PM	93XX - External Problems	Unit tripped alarm.	Actual	Wallowa Falls	3/4/2004 03:00:41 PM		1.1	15.6008	17.16
1999	3/6/2004 12:50:02 PM	93XX - External Problems	Unit back on line. No events found. Line trouble in area last night. Ceiling fan not running, breaker reset. Thermostat is near that panel.	Actual	Wallowa Falls	3/6/2004 01:20:37 PM		1.1	.5097	.56
2001	3/8/2004 02:40:04 PM	93XX - External Problems	Unit off line, phone alarm. Unit back on line. No events found. Fan ok.	Actual	Wallowa Falls	3/8/2004 03:14:04 PM		1.1	.5667	.62
2029	3/29/2004 09:43:13 PM	93XX - External Problems	Unit trip alarm. Unit down caused by tree down through the line.	Actual	Wallowa Falls	3/29/2004 10:55:13 PM		1.1	1.2	1.32
2084	4/26/2004 03:52:49 PM	70XX - Turbine	Tripped on bearing temperature.	Actual	Wallowa Falls	4/26/2004 05:45:49 PM		1.1	1.8833	2.07
2100	5/4/2004 01:19:54 AM	93XX - External Problems	Unit trip alarm.	Actual	Wallowa Falls	5/4/2004 09:00:03 AM		1.1	7.6692	8.44
2134	5/21/2004 09:10:38 PM	93XX - External Problems	Unit back on line.	Actual	Wallowa Falls	5/21/2004 10:00:38 PM		1.1	.8333	.92
2148	6/3/2004 03:00:25 PM	45XX - Generator/Exciter	Tripped off at 1500. High bearing temp.	Actual	Wallowa Falls	6/3/2004 03:35:25 PM		1.1	.5833	.64
2151	6/3/2004 07:00:18 PM	45XX - Generator/Exciter	Trip unit off again.	Actual	Wallowa Falls	6/4/2004 10:50:18 AM		1.1	15.8333	17.42
2153	6/4/2004 05:50:21 PM	93XX - External Problems	Unit tripped off again.	Actual	Wallowa Falls	6/7/2004 10:10:21 AM		1.1	64.3333	70.77
2164	6/20/2004 02:00:53 PM	93XX - External Problems	Under frequency alarm found.	Actual	Wallowa Falls	6/20/2004 02:25:53 PM		1.1	.4167	.46

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
2175	6/23/2004 06:15:03 AM	93XX - External Problems	Unit trip alarm, line trouble took it off.	Actual	Wallowa Falls	6/23/2004 02:40:03 PM		1.1	8.4167	9.26
2183	6/27/2004 05:46:19 AM	93XX - External Problems	Trip due to bump on the line.	Actual	Wallowa Falls	6/27/2004 01:05:19 PM		1.1	7.3167	8.05
2188	6/29/2004 05:00:15 PM	93XX - External Problems	Lighting storm through area caused trip.	Actual	Wallowa Falls	6/29/2004 10:45:15 PM		1.1	5.75	6.33
2189	6/30/2004 12:30:08 PM	93XX - External Problems	Unit trip. Back on line.	Actual	Wallowa Falls	6/30/2004 01:50:08 PM		1.1	1.3333	1.47
2203	7/4/2004 11:40:25 PM	93XX - External Problems	Unit trip phone alarm.	Actual	Wallowa Falls	7/6/2004 01:00:09 PM		1.1	37.3289	41.06
2213	7/9/2004 06:32:24 AM	93XX - External Problems	Plant trip.	Actual	Wallowa Falls	7/9/2004 01:25:45 PM		1.1	6.8892	7.58
2219	7/10/2004 04:25:33 PM	70XX - Turbine	Cutout blew on unit feeder relaying on under voltage and frequency.	Actual	Wallowa Falls	7/11/2004 11:44:50 AM		1.1	19.3214	21.25
2229	7/14/2004 05:17:45 PM	70XX - Turbine	Plant trip.	Actual	Wallowa Falls	7/15/2004 10:17:07 AM		1.1	16.9894	18.69
2247	7/18/2004 12:05:27 AM	93XX - External Problems	Plant trip. George says there was lightning last night. Put back online.	Actual	Wallowa Falls	7/18/2004 03:50:27 PM		1.1	15.75	17.33
2292	8/4/2004 04:35:52 PM	93XX - External Problems	Unit tripped due to bump on line. Lightning storm in area.	Actual	Wallowa Falls	8/4/2004 07:55:19 PM		1.1	3.3242	3.66
2298	8/6/2004 04:30:54 PM	93XX - External Problems	George Becker reports 230KV outage to area caused trip.	Actual	Wallowa Falls	8/6/2004 06:13:56 PM		1.1	1.7172	1.89
2308	8/11/2004 04:23:05 AM	93XX - External Problems	Unit trip alarm.	Actual	Wallowa Falls	8/11/2004 08:55:05 AM		1.1	4.5333	4.99
2329	8/25/2004 12:16:04 AM	71XX - Water Delivery System	Unit trip alarm.	Actual	Wallowa Falls	9/7/2004 04:50:50 PM		1.1	328.5794	361.44
2362	9/14/2004 09:00:51 PM	93XX - External Problems	Unit off line phone alarm. High line trouble.	Actual	Wallowa Falls	9/14/2004 10:12:53 PM		1.1	1.2006	1.32
2392	10/5/2004 09:46:16 AM	93XX - External Problems	Unit off line phone alarm. High line trouble.	Actual	Wallowa Falls	10/5/2004 10:45:16 AM		1.1	.9833	1.08
2404	10/10/2004 06:16:24 PM	93XX - External Problems	Unit trip alarm.	Actual	Wallowa Falls	10/11/2004 09:05:14 AM		1.1	14.8139	16.3
2479	11/7/2004 12:52:54 PM	93XX - External Problems	George Becker called from plant. He will try to put it on. Looks likes system bump took it off.	Actual	Wallowa Falls	11/7/2004 01:10:54 PM		1.1	.3	.33
2486	11/10/2004 09:47:24 AM	70XX - Turbine	George Becker called, will be taking unit off line. Unit has a broken bucket.	Actual	Wallowa Falls	11/18/2004 09:57:25 AM		1.1	192.1669	211.38
2575	1/12/2005 08:30:22 AM	93XX - External Problems	Wallowa falls trip.	Actual	Wallowa Falls	1/12/2005 11:00:34 AM		1.1	2.5033	2.75
2624	2/4/2005 10:19:34 AM	36XX - Electrical Systems	George found unit tripped and penstock empty. Headgate closed because of no DC. NO DC because the battery charger is tripped. Breaker won't reclose. He will contact Dave Williams to see if he can get water back in penstock	Actual	Wallowa Falls	2/5/2005 10:15:26 AM		1.1	23.9311	26.32

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
2629	2/7/2005 02:12:28 AM	36XX - Electrical Systems	Dennis McCleary reports penstock drained. Will need to check headgate after daylight. Refused battery charger. Batteries will have to charge to check things out further.	Actual	Wallowa Falls	2/8/2005 06:35:06 PM		1.1	40.3772	44.41
2633	2/8/2005 07:57:35 PM	71XX - Water Delivery System	Williams has reported head gate has gone closed again, unknown cause, battery voltage is good.	Actual	Wallowa Falls	2/9/2005 06:45:23 PM		1.1	22.7967	25.08
2688	3/24/2005 09:30:36 AM	93XX - External Problems	Plant trip alarm. George Becker reports plant back on line. Cause line trouble.	Actual	Wallowa Falls	3/24/2005 01:12:07 PM		1.1	3.6919	4.06
2692	3/26/2005 04:57:14 PM	93XX - External Problems	3.26 log not available.	Actual	Wallowa Falls	3/26/2005 07:45:49 PM		1.1	2.8097	3.09
2747	5/4/2005 06:15:43 PM	71XX - Water Delivery System	Called out Dennis McCleary. Said there is lightning in the area. PVC pipe in restroom ruptured. Flooded plant. 18"-24" of standing water. Leak shut off.	Actual	Wallowa Falls	5/11/2005 02:10:35 PM		1.1	163.9144	180.31
2807	5/31/2005 04:10:48 PM	93XX - External Problems	Unit back on line. Tripped on frequency.	Actual	Wallowa Falls	5/31/2005 05:00:48 PM		1.1	.8333	.92
2960	7/15/2005 03:55:34 PM	70XX - Turbine	Plant tripped. Put plant back on line. It's hot there so put another fan to keep cool.	Actual	Wallowa Falls	7/15/2005 04:25:58 PM		1.1	.5067	.56
2983	7/21/2005 02:35:14 PM	93XX - External Problems	Unit back on line 1715- relayed on under voltage.	Actual	Wallowa Falls	7/21/2005 05:15:01 PM		1.1	2.6631	2.93
3059	7/28/2005 02:30:34 PM	93XX - External Problems	Trip alarm in. Plant back on line tripped on high ambient temp.	Actual	Wallowa Falls	7/28/2005 06:56:34 PM		1.1	4.4333	4.88
3078	8/5/2005 02:30:54 PM	38XX - Auxiliary Systems	Trip alarm in. Plant back on line tripped on high ambient temp.	Actual	Wallowa Falls	8/5/2005 05:00:54 PM		1.1	2.5	2.75
3118	8/23/2005 02:46:07 AM	93XX - External Problems	Unit trip alarm. Unit back on line.	Actual	Wallowa Falls	8/23/2005 09:30:36 AM		1.1	6.7414	7.42
3166	9/19/2005 01:25:31 PM	93XX - External Problems	Unit tripped, Unit back on line-69KV line trouble.	Actual	Wallowa Falls	9/19/2005 04:58:08 PM		1.1	3.5436	3.9
3234	10/24/2005 11:20:17 AM	93XX - External Problems	Unit tripped, Plant back on line, George Becker.	Actual	Wallowa Falls	10/24/2005 03:40:00 PM		1.1	4.3286	4.76
3244	11/1/2005 01:05:07 PM	93XX - External Problems	Unit trip alarm.	Actual	Wallowa Falls	11/2/2005 05:15:01 AM		1.1	16.165	17.78
3388	2/3/2006 11:42:29 AM	93XX - External Problems	Plant trip.	Actual	Wallowa Falls	2/3/2006 01:45:29 PM		1.1	2.05	2.26
3412	2/14/2006 12:27:32 PM	93XX - External Problems	Unit trip on CB 6W101 phone alarm.	Actual	Wallowa Falls	2/14/2006 02:45:32 PM		1.1	2.3	2.53
3474	3/20/2006 12:55:48 PM	93XX - External Problems	Unit trip phone alarm in. Unit back on line. Line trouble.	Actual	Wallowa Falls	3/20/2006 02:22:32 PM		1.1	1.4456	1.59
3511	4/4/2006 01:28:17 AM	70XX - Turbine	Unit trip alarm. Plant back online. HPU unit was tripped.	Actual	Wallowa Falls	4/4/2006 11:01:16 AM		1.1	9.5497	10.5
3529	4/8/2006 07:08:06 AM	38XX - Auxiliary Systems	CB 6W101 unit open. Unit trip alarm. North dispatch called will need lineman to put back online. Found HPU tripped again. Put back on but 86F will not reset. HPU off was reset.	Actual	Wallowa Falls	4/8/2006 07:40:20 PM		1.1	12.5372	13.79

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
3532	4/11/2006 03:30:38 AM	38XX - Auxiliary Systems	Plant trip. Alarm in. George Becker reports the Meg switch control for hydraulic pump is not working properly.	Actual	Wallowa Falls	4/18/2006 06:25:37 PM		1.1	182.9164	201.21
3593	4/29/2006 03:05:40 PM	93XX - External Problems	Unit trip alarm. North dispatch confirmed a momentary outage on the transmission line occurred.	Actual	Wallowa Falls	4/29/2006 04:15:40 PM		1.1	1.1667	1.28
3637	5/14/2006 02:40:41 PM	93XX - External Problems	Unit trip phone alarm. Unit back online. Note: Fans were turned on to help with cooling.	Actual	Wallowa Falls	5/14/2006 03:30:11 PM		1.1	.825	.91
3638	5/14/2006 06:28:19 PM	93XX - External Problems	Unit trip phone alarm. Unit back online. Note: Fans were turned on to help with cooling.	Actual	Wallowa Falls	5/14/2006 07:30:18 PM		1.1	1.0331	1.14
3644	5/16/2006 03:18:38 PM	38XX - Auxiliary Systems	Unit trip. Unit back on. Unit tripped on mechanical.	Actual	Wallowa Falls	5/16/2006 04:20:38 PM		1.1	1.0333	1.14
3649	5/17/2006 03:22:34 PM	70XX - Turbine	Unit tripped off line. Unit back on line and reduced output to 1.1 MW. Unit overheated outage.	Actual	Wallowa Falls	5/17/2006 05:21:34 PM		1.1	1.9833	2.18
3656	5/18/2006 06:20:05 PM	45XX - Generator/Exciter	Unit tripped. Unit back on at 1MW, no targets, but Seth reports there were mechanical and electrical trips.	Actual	Wallowa Falls	5/18/2006 07:30:05 PM		1.1	1.1667	1.28
3658	5/19/2006 06:16:14 PM	93XX - External Problems	Unit tripped. Unit back. lightning took it out.	Actual	Wallowa Falls	5/19/2006 07:05:14 PM		1.1	.8167	.9
3745	6/25/2006 04:20:42 PM	45XX - Generator/Exciter	CB 6W101 tripped. Unit back on line. High temperatures.	Actual	Wallowa Falls	6/25/2006 04:54:38 PM		1.1	.5656	.62
3752	6/27/2006 01:27:30 PM	70XX - Turbine	Unit tripped. Unit online. Unit tripped on bearing temp.	Actual	Wallowa Falls	6/27/2006 02:40:30 PM		1.1	1.2167	1.34
3755	6/27/2006 05:15:37 PM	70XX - Turbine	Unit tripped. Unit back. Bearing temp.	Actual	Wallowa Falls	6/27/2006 08:10:37 PM		1.1	2.9167	3.21
3757	6/28/2006 03:20:09 PM	70XX - Turbine	Unit tripped. Unit overheating.	Actual	Wallowa Falls	6/28/2006 04:30:09 PM		1.1	1.1667	1.28
3760	6/29/2006 07:30:36 AM	93XX - External Problems	Unit trip. Unit online. Bump on line caused trip.	Actual	Wallowa Falls	6/29/2006 09:35:23 AM		1.1	2.0797	2.29
3774	7/2/2006 03:40:02 PM	45XX - Generator/Exciter	Unit trip. High bearing temp. Hot day.	Actual	Wallowa Falls	7/2/2006 07:30:02 PM		1.1	3.8333	4.22
3778	7/3/2006 07:35:46 PM	93XX - External Problems	Unit trip. Unit back on. Under voltage.	Actual	Wallowa Falls	7/3/2006 09:10:46 PM		1.1	1.5833	1.74
3784	7/4/2006 02:35:29 PM	93XX - External Problems	Unit trip. Phone alarm. North dispatch reports lightning storm in area.	Actual	Wallowa Falls	7/5/2006 10:25:04 AM		1.1	19.8264	21.81
3799	7/8/2006 05:25:44 PM	38XX - Auxiliary	CB 6W101 tripped. Tripped due to high temperatures.	Actual	Wallowa Falls	7/8/2006 07:38:44 PM		1.1	2.2167	2.44
3808	7/11/2006 03:44:45 PM	70XX - Turbine	Plant trip alarm in. Unit online tripped on bearing temp. Very hot day.	Actual	Wallowa Falls	7/11/2006 04:38:45 PM		1.1	.9	.99
3815	7/14/2006 04:15:45 PM	70XX - Turbine	Plant trip. Plant online. High bearing temp dumped it.	Actual	Wallowa Falls	7/14/2006 04:50:45 PM		1.1	.5833	.64
3819	7/15/2006 04:45:09 PM	38XX - Auxiliary Systems	High temperature, lack of adequate cooling fans.	Actual	Wallowa Falls	7/15/2006 05:30:09 PM		1.1	.75	.83
3823	7/16/2006 03:25:30 PM	38XX - Auxiliary Systems	Tripped, back online. Outside temperatures.	Actual	Wallowa Falls	7/16/2006 04:36:30 PM		1.1	1.1833	1.3
3824	7/17/2006 05:30:26 PM	70XX - Turbine	Unit trip. Back online. Tripped on bearing temp.	Actual	Wallowa Falls	7/17/2006 05:55:26 PM		1.1	.4167	.46

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
3828	7/19/2006 04:30:23 PM	38XX - Auxiliary	CB 6W101 tripped. CB 6W101 closed. Unit back online. Relayed on bearing temp.	Actual	Wallowa Falls	7/19/2006 05:40:06 PM		1.1	1.1619	1.28
3830	7/20/2006 03:46:14 PM	38XX - Auxiliary Systems	CB 6W101 tripped. CB 6W101 closed. Unit back online. Relayed on bearing temp.	Actual	Wallowa Falls	7/20/2006 04:48:14 PM		1.1	1.0333	1.14
3832	7/21/2006 01:35:28 PM	70XX - Turbine	CB 6W101 tripped. CB 6W101 closed. Unit back online. Relayed on bearing temp.	Actual	Wallowa Falls	7/21/2006 05:05:37 PM		1.1	3.5025	3.85
3834	7/22/2006 12:46:27 PM	38XX - Auxiliary Systems	CB 6W101 tripped. CB 6W101 closed. Unit back online. Relayed on bearing temp.	Actual	Wallowa Falls	7/22/2006 04:55:11 PM		1.1	4.1456	4.56
3838	7/23/2006 12:14:27 PM	38XX - Auxiliary Systems	CB 6W101 tripped. CB 6W101 closed. Unit back online. Relayed on bearing temp.	Actual	Wallowa Falls	7/23/2006 05:40:43 PM		1.1	5.4378	5.98
3891	8/10/2006 06:30:18 PM	93XX - External Problems	Unit trip alarm. Unit online. Lightening caused bump in line.	Actual	Wallowa Falls	8/10/2006 07:00:18 PM		1.1	.5	.55
3910	8/17/2006 07:32:32 AM	71XX - Water Delivery System	George Becker reports he has shut down the unit as he believes there is either a broken bucket or something stuck in the nozzle. He inspected the buckets on the wheel and they look good. Found a rock stuck behind the needle valve and removed it and is going to start the unit back up.	Actual	Wallowa Falls	8/17/2006 04:23:34 PM		1.1	8.8506	9.74
3913	8/18/2006 09:09:32 AM	93XX - External Problems	Plant trip offline. Plant back online. Tripped on an undervoltage.	Actual	Wallowa Falls	8/18/2006 10:29:39 AM		1.1	1.3353	1.47
4030	10/25/2006 03:40:02 PM	70XX - Turbine	Dave Williams reports taking plant off line to dewater penstock to clear turbine nozzle. Gary Hazlet reports found bucket broke off in turbine.	Actual	Wallowa Falls	11/1/2006 04:44:04 PM		1.1	169.0672	185.97
4053	11/6/2006 03:54:36 AM	93XX - External Problems	George Becker reports trip caused by pole fire, tripped on undervoltage.	Actual	Wallowa Falls	11/6/2006 12:06:56 PM		1.1	8.2056	9.03
4065	11/10/2006 02:00:03 PM	93XX - External Problems	Wind has caused a wire to go down. Wire back up. Unit has to be started at the plant as there are a few bugs in the program.	Actual	Wallowa Falls	11/10/2006 04:50:03 PM		1.1	2.8333	3.12
4068	11/12/2006 11:16:43 PM	93XX - External Problems	Mechanical lockout.	Actual	Wallowa Falls	11/13/2006 07:20:55 AM		1.1	8.07	8.88
4075	11/14/2006 01:20:22 PM	93XX - External Problems	Cause of trip bump on line.	Actual	Wallowa Falls	11/14/2006 02:40:22 PM		1.1	1.3333	1.47
4079	11/16/2006 01:34:14 AM	93XX - External Problems	Generator mechanical lockout. Will not start. High winds.	Actual	Wallowa Falls	11/16/2006 12:57:37 PM		1.1	11.3897	12.53
4112	12/12/2006 08:00:05 AM	93XX - External Problems	Tripped off. Could not find what caused plant to go off. May have lost communication. Had mechanical lockout but no other targets.	Actual	Wallowa Falls	12/12/2006 11:38:10 AM		1.1	3.6347	4.
4113	12/12/2006 01:30:30 PM	93XX - External Problems	Plant tripped off again. Got alarms. Time under current and overvoltage both in. Suspect problem with local system area. Julie at Enterprise reports there was a system event. 69KV breaker tripped.	Actual	Wallowa Falls	12/12/2006 04:10:35 PM		1.1	2.6681	2.93
4120	12/15/2006 04:11:18 AM	38XX - Auxiliary Systems	86M mechanical lockout alarm. 86M and undervoltage.	Actual	Wallowa Falls	12/15/2006 05:15:02 AM		1.1	1.0622	1.17
4184	1/23/2007 01:56:19 PM	38XX - Auxiliary Systems	Unit tripped on relay 11. Mechanical lockout in. George Becker reports that the HPU needs an oil change. Oil is thick.	Actual	Wallowa Falls	2/2/2007 10:48:58 AM		1.1	236.8775	260.57

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
4295	4/1/2007 08:16:59 PM	93XX - External Problems	Unit trip alarm over current lockout. Unit back on line. There was a bump on the line.	Actual	Wallowa Falls	4/1/2007 08:55:59 PM		1.1	.65	.72
4371	6/2/2007 05:12:37 PM	38XX - Auxiliary Systems	Gen. mechanical lockout alarm- 86M- CB 6W 101 open, unit off line. Gen undervoltage alarm. Turbine guide bearing temp. alarm. Mechanical overspeed time delay alarm	Actual	Wallowa Falls	6/2/2007 07:18:34 PM		1.1	2.0992	2.31
4374	6/3/2007 12:18:12 PM	70XX - Turbine	Unit tripped off line. Generator stator temp high alarm. 86M mechanical lockout and guide bearing temp. high alarm. nozzle only opened to 40% in auto. Will manually open nozzle and return to auto and monitor operation. Fans on and window open	Actual	Wallowa Falls	6/3/2007 01:30:59 PM		1.1	1.2131	1.33
4376	6/3/2007 04:32:19 PM	38XX - Auxiliary Systems	Generator stator high temp alarm. Indicates temp at 103 on 49TD1 device. HCC unit load control will not work from HCC. CB 6W101 open. Unit relayed off line. Gen mechanical lockout alarm- 86M-Gen. undervoltage alarm. Turbine guide bearing alarm. Mechanical overspeed time delay alarm	Actual	Wallowa Falls	6/4/2007 10:00:40 AM		1.1	17.4725	19.22
4395	6/17/2007 11:25:40 AM	38XX - Auxiliary Systems	6/17 log not there.	Actual	Wallowa Falls	6/19/2007 07:32:50 PM		1.1	56.1194	61.73
4427	6/29/2007 04:21:57 AM	93XX - External Problems	General plant alarm. Generator undervoltage alarm and a mechanical overspeed time delay alarm	Actual	Wallowa Falls	6/29/2007 04:40:57 AM		1.1	.3167	.35
4440	7/5/2007 03:47:09 PM	45XX - Generator/Exciter	Unit tripped off line from Turbine guide bearing temperature alarm. Mechanical lockout 86M.	Actual	Wallowa Falls	7/5/2007 06:53:35 PM		1.1	3.1072	3.42
4443	7/6/2007 08:55:48 AM	93XX - External Problems	Plant tripped offline. Appears to have lost communication. Informed by local lineman that the entire town is out of power due to a recloser control failure. Received a report that Wallowa plant is flooding. Plant back online. Lineman found plant dry and needle valve at 60% open.	Actual	Wallowa Falls	7/6/2007 01:20:09 PM		1.1	4.4058	4.85
4451	7/10/2007 06:14:04 AM	93XX - External Problems	No outage recorded for this time and date.	Actual	Wallowa Falls	7/10/2007 08:49:04 AM		1.1	2.5833	2.84
4462	7/13/2007 07:30:30 AM	93XX - External Problems	No outage recorded for this time and date.	Actual	Wallowa Falls	7/13/2007 08:40:30 AM		1.1	1.1667	1.28
4534	8/9/2007 04:07:22 PM	39XX - Controls/Communication	No outage recorded for this time and date. Problem traced back to PLC lines backed up.	Actual	Wallowa Falls	8/10/2007 12:40:30 PM		1.1	20.5522	22.61
4540	8/10/2007 03:10:58 PM	39XX - Controls/Communication	Unit offline due to low penstock pressure and low forebay level.	Actual	Wallowa Falls	8/10/2007 05:30:35 PM		1.1	2.3269	2.56
4582	8/31/2007 04:59:51 PM	93XX - External Problems	Mechanical overspeed generator undervoltage and Ethernet bridge communications alarm. Jim North dispatch confirmed power outage in area. Unable to start unit remotely. Doesn't look like nozzle is opening. Indication is at 3.5% will not go to 0 in manual and does not open when start is initiated in auto. Penstock pressure is 503. Waited over 15 min. and never did get an incomplete sequence	Actual	Wallowa Falls	9/1/2007 07:05:17 PM		1.1	26.0906	28.7
4626	9/25/2007 12:10:16 PM	71XX - Water Delivery System	Unit off line to repair HPU hydraulic pump.	Actual	Wallowa Falls	10/17/2007 12:45:33 PM		1.1	528.5881	581.45

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
4670	10/18/2007 03:53:24 PM	93XX - External Problems	Mechanical overspeed time delay alarm. Malfunction relay alarm. Generator overvoltage. Line feeder bump caused trip.	Actual	Wallowa Falls	10/18/2007 04:15:55 PM		1.1	.3753	.41
4708	11/12/2007 09:52:40 AM	93XX - External Problems	Nozzle position is 0.4. Unit is off line. Bobby Perez says several outages in Enterprise area. Julie Lewis, Enterprise confirms several poles and wires are down in Wallowa area.	Actual	Wallowa Falls	11/15/2007 07:55:26 AM		1.1	70.0461	77.05
4723	11/20/2007 04:31:00 PM	93XX - External Problems	Generator malfunction relay. Generator under voltage & general plant alarms. Julie Lewis confirms line disturbance in area.	Actual	Wallowa Falls	11/20/2007 04:52:00 PM		1.1	.35	.39
4742	12/2/2007 03:30:36 PM	93XX - External Problems	Unit tripped. Having a windstorm.	Actual	Wallowa Falls	12/3/2007 04:07:14 PM		1.1	24.6106	27.07
4790	1/3/2008 05:56:31 PM	93XX - External Problems	Unit 86E lockout alarm- time over-current 51V alarm-PLT 30- Undervoltage alarm. All alarms reset except 86E and PLT 30 alarms.	Actual	Wallowa Falls	1/3/2008 07:20:31 PM		1.1	1.4	1.54
4798	1/4/2008 10:06:24 AM	93XX - External Problems	Lost communication lines with plant. Had plant 30 general alarm and generator 27 undervoltage alarm. Reset all alarms and started unit.	Actual	Wallowa Falls	1/4/2008 11:10:24 AM		1.1	1.0667	1.17
4800	1/4/2008 02:06:32 PM	93XX - External Problems	30 general alarm. Penstock pressure 63 alarm. CB 6W 101 open unit offline. Found headgate had dropped.	Actual	Wallowa Falls	1/6/2008 01:49:48 PM		1.1	47.7211	52.49
4806	1/6/2008 04:18:28 PM	71XX - Water Delivery System	Penstock low pressure, penstock low pressure trip alarm. Penstock pressure returned to normal. Unit on line by SCADA with higher penstock pressure set points.	Actual	Wallowa Falls	1/6/2008 06:20:54 PM		1.1	2.0406	2.24
4867	2/7/2008 05:48:26 AM	93XX - External Problems	Unit tripped. Undervoltage.	Actual	Wallowa Falls	2/7/2008 06:28:26 AM		1.1	.6667	.73
4886	2/14/2008 09:15:56 AM	93XX - External Problems	Unit tripped. Unit back on line, bump in line.	Actual	Wallowa Falls	2/14/2008 10:00:56 AM		1.1	.75	.83
4939	3/13/2008 08:35:56 PM	93XX - External Problems	Marvin Boggs, North dispatch reports he had a line outage due to pole fire. Inquiring if unit was on line. SCADA indicates last update was at 2028- unit on line. Connected via phone line to plant and it confirmed unit was off line. Marvin Boggs conformed ok to restore to service. Reset alarms and initiated start.	Actual	Wallowa Falls	3/13/2008 10:04:56 PM		1.1	1.4833	1.63
5037	4/14/2008 10:01:52 PM	93XX - External Problems	George Becker reports there is a locked out feeder. The locked out feeder was the cause of outage.	Actual	Wallowa Falls	4/15/2008 02:55:48 AM		1.1	4.8989	5.39
5042	4/15/2008 09:35:28 PM	71XX - Water Delivery System	Unit down. Low penstock pressure. Will restart when penstock filled.	Actual	Wallowa Falls	4/16/2008 09:26:08 PM		1.1	23.8444	26.23
5044	4/18/2008 12:04:20 PM	93XX - External Problems	Broken insulator on high side of transformer. Will take emergency shut down to fix. Broken skirt on one phase of gang operated switch. Recommends replacement. Unit off line.	Actual	Wallowa Falls	4/18/2008 03:14:08 PM		1.1	3.1633	3.48
5074	5/17/2008 05:25:09 PM	70XX - Turbine	Unit tripped. Reset 86M lockout.	Actual	Wallowa Falls	5/17/2008 07:17:09 PM		1.1	1.8667	2.05
5084	5/20/2008 01:36:30 PM	93XX - External Problems	All three units tripped. Trip caused by system disturbance.	Actual	Wallowa Falls	5/20/2008 02:54:30 PM		1.1	1.3	1.43
5095	5/28/2008 10:15:38 PM	93XX - External Problems	Mechanical overspeed time delay alarm. 86E electrical lockout alarm. Generator undervoltage alarm. Cause of trip- line disturbance.	Actual	Wallowa Falls	5/28/2008 10:59:38 PM		1.1	.7333	.81

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
5096	5/29/2008 11:36:22 AM	93XX - External Problems	Outage # 5098 CB 1P35 relayed open. All alarms and lockout reset. Cause of trip reverse power.	Actual	Wallowa Falls	5/29/2008 04:42:06 PM		1.1	5.0956	5.61
5119	6/11/2008 01:20:51 PM	38XX - Auxiliary Systems	Unit trip. 86E lockout. Malfunction relay 11 alarm. Notified George Becker & Dan Weisser. Weisser to be at plant in 30 min. to reset lockout.	Actual	Wallowa Falls	6/11/2008 02:22:54 PM		1.1	1.0342	1.14
5160	6/30/2008 06:53:53 PM	93XX - External Problems	Penstock low PSI, Penstock high PSI, penstock no PSI. Time overcurrent 51V alarm. Penstock pressure @ 223 PSI and dropping. Notified George Becker and he reports severe thunderstorms in area and headgate likely closed due to lightning.	Actual	Wallowa Falls	7/1/2008 12:17:40 PM		1.1	17.3964	19.14
5194	7/18/2008 01:03:54 PM	93XX - External Problems	Plant trip, undervoltage alarm trip. Cause of trip, line disturbance.	Actual	Wallowa Falls	7/18/2008 02:55:37 PM		1.1	1.8619	2.05
5233	8/8/2008 06:45:15 AM	71XX - Water Delivery System	Unit off line for loss of penstock pressure. Appears headgate closed during lightning storm.	Actual	Wallowa Falls	8/8/2008 06:22:00 PM		1.1	11.6125	12.77
5252	8/20/2008 07:45:58 PM	93XX - External Problems	Connection to plant confirmed unit off line. Transmission between Walla Walla and Hell's canyon out.	Actual	Wallowa Falls	8/20/2008 09:06:58 PM		1.1	1.35	1.49
5262	8/25/2008 08:18:19 PM	93XX - External Problems	Unit off line. Headgate closed causing penstock pressure to drop. George Becker reports lightning in the area.	Actual	Wallowa Falls	8/26/2008 09:04:04 AM		1.1	12.7625	14.04
5266	8/27/2008 04:27:47 PM	39XX - Controls/Communication	Unit off line. Front turbine bearing oil flow alarm. Back turbine bearing oil flow alarm. General plant alarm. Penstock no pressure alarm. George Becker on site to investigate. Headgate closed.	Actual	Wallowa Falls	9/4/2008 05:30:36 PM		1.1	193.0469	212.35
5410	12/10/2008 05:46:23 AM	71XX - Water Delivery System	Low penstock pressure alarm. Penstock frozen over, headgate shut. Plant tripped.	Actual	Wallowa Falls	12/10/2008 06:55:23 PM		1.1	13.15	14.47
5432	12/21/2008 12:38:29 PM	93XX - External Problems	Unit trip, generator under voltage. No alarm received at HCC.	Actual	Wallowa Falls	12/21/2008 05:52:29 PM		1.1	5.2333	5.76
5476	1/23/2009 10:10:56 AM	39XX - Controls/Communication	Determined headgate to either be partially closed or obstructed.	Actual	Wallowa Falls	1/24/2009 11:40:51 AM		1.1	25.4986	28.05
5529	2/15/2009 11:56:33 PM	71XX - Water Delivery System	Headgate drifted closed because of ice blockage in penstock.	Actual	Wallowa Falls	2/17/2009 01:41:15 AM		1.1	25.745	28.32
5701	5/29/2009 04:00:36 PM	93XX - External Problems	Unit down, phone communication down. Line too week to communicate.	Actual	Wallowa Falls	6/1/2009 02:10:19 PM		1.1	70.1619	77.18
5771	7/9/2009 10:10:11 AM	70XX - Turbine	Unit taken off line by George Becker due to possible debris in needle valve and/or pelton bucket may be broken.	Actual	Wallowa Falls	7/14/2009 05:05:30 PM		1.1	126.9219	139.61
5834	7/28/2009 03:41:54 PM	93XX - External Problems	Trip caused by lightening, line disturbance.	Actual	Wallowa Falls	7/28/2009 07:12:54 PM		1.1	3.5167	3.87
6290	10/26/2009 12:31:37 PM	93XX - External Problems	unit tripped off line. Under voltage plant general and mechanical overspeed alarms. Mechanical overspeed reset ok. Julie Todd reports pole broken & wires down due to tree falling.	Actual	Wallowa Falls	10/26/2009 04:13:37 PM		1.1	3.7	4.07

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
6401	11/17/2009 04:35:39 AM	93XX - External Problems	Unit offline because of storm damage. Transmission unavailable.	Actual	Wallowa Falls	11/18/2009 02:00:24 PM		1.1	33.4125	36.75
6443	11/23/2009 10:30:53 AM	38XX - Auxiliary Systems	Unit offline.	Actual	Wallowa Falls	11/24/2009 05:40:31 PM		1.1	31.1606	34.28
6461	11/30/2009 03:15:48 PM	71XX - Water Delivery System	Unit went offline with no alarm. Turbine nozzle control alarm came in after reset of modem dial-up. AP-HCU motor bad.	Actual	Wallowa Falls	12/1/2009 06:18:07 PM		1.1	27.0386	29.74
7421	4/21/2010 12:24:00 AM	93XX - External Problems	Unit trip. Generator electrical lockout alarm. Generator under voltage alarm. Outage caused by lightning storm.	Actual	Wallowa Falls	4/21/2010 11:10:00 AM		1.1	10.7667	11.84
7510	5/8/2010 03:35:00 AM	38XX - Auxiliary Systems	Unit trip. Turbine nozzle control alarm. Had lost governor control. Reset switch on motor for hydraulic control to nozzle and nozzle has returned to closed position.	Actual	Wallowa Falls	5/8/2010 05:25:00 AM		1.1	1.8333	2.02
7512	5/9/2010 04:30:00 PM	38XX - Auxiliary Systems	Chad Cooney reports nozzle open 25 degrees, HPU tripped again, HPU reset, nozzle closed.	Actual	Wallowa Falls	5/9/2010 05:30:00 PM		1.1	1.	1.1
7513	5/9/2010 10:00:00 PM	38XX - Auxiliary Systems	Unit out of service.	Actual	Wallowa Falls	5/11/2010 12:23:00 PM		1.1	38.3833	42.22
7641	5/28/2010 07:46:00 AM	93XX - External Problems	Unit trip. Grid operators reports transmission issue and request unit to remain offline.	Actual	Wallowa Falls	5/28/2010 08:28:00 AM		1.1	.7	.77
7700	6/5/2010 10:50:00 AM	36XX - Electrical Systems	86E will not reset by dial-up. Back turbine bearing oil flow alarm still in.	Actual	Wallowa Falls	6/5/2010 12:02:00 PM		1.1	1.2	1.32
7903	7/9/2010 02:21:00 AM	93XX - External Problems	Plant tripped offline. No problem found.	Actual	Wallowa Falls	7/9/2010 04:25:00 AM		1.1	2.0667	2.27
8079	7/27/2010 03:00:00 PM	93XX - External Problems	Unit relayed off on 51V- gen 27- PLT 30 alarms. Alarms reset to normal.	Actual	Wallowa Falls	7/27/2010 03:35:00 PM		1.1	.5833	.64
8088	7/28/2010 12:54:00 PM	39XX - Controls/Communication	Unit tripped offline. Comm failure.	Actual	Wallowa Falls	7/28/2010 02:18:00 PM		1.1	1.4	1.54
8174	8/12/2010 06:14:00 AM	93XX - External Problems	Unit trip. Mechanical overspeed. Penstock high pressure, penstock low pressure, overspeed, turbine nozzle control, front and back bearing oil flow. All alarms reset but nozzle still open 53.4. Restart attempt unsuccessful.	Actual	Wallowa Falls	8/12/2010 07:41:00 AM		1.1	1.45	1.6
8294	8/26/2010 03:30:00 PM	93XX - External Problems	Unit off line. Ethernet comm alarm. Ethernet comm alarm returned to normal. Cause of trip, tree on line.	Actual	Wallowa Falls	8/26/2010 04:20:00 PM		1.1	.8333	.92
8364	9/7/2010 09:08:00 AM	93XX - External Problems	Unit tripped due to line outage.	Actual	Wallowa Falls	9/7/2010 11:00:00 AM		1.1	1.8667	2.05
8365	9/7/2010 12:19:00 PM	93XX - External Problems	under voltage alarm. Alarm reset ok. Nozzle did not close on shutdown. Placed control on manual to close.	Actual	Wallowa Falls	9/7/2010 12:42:00 PM		1.1	.3833	.42
8496	9/27/2010 02:54:00 PM	45XX - Generator/Exciter	Unit tripped offline. Multi-function relay alarm 86E lockout. Frequency flagged on multifunction relay no other alarms. MF Relay and 86E reset.	Actual	Wallowa Falls	9/27/2010 04:12:00 PM		1.1	1.3	1.43
8798	11/4/2010 09:48:00 AM	93XX - External Problems	Trip may have occurred due to hazardous excursion.	Actual	Wallowa Falls	11/4/2010 11:15:00 AM		1.1	1.45	1.6

Outage Number	Outage Start (Date/Time)	Cause	Explanation	Classification	Unit Name	Outage End (Date/Time)	Estimated RTS Date	Unit MW Capacity	Duration (Hours)	Potential Lost Generation (MWHrs)
8865	11/16/2010 01:51:00 AM	93XX - External Problems	Plant tripped, because of severe wind storm.	Actual	Wallowa Falls	11/18/2010 08:20:00 PM		1.1	66.4833	73.13
9213	1/10/2011 03:05:00 PM	71XX - Water Delivery System	Penstock pressure in and out. Unit on line. Load control placed to manual. Parts on order for pressure transmitter repair.	Actual	Wallowa Falls	1/10/2011 03:40:00 PM		1.1	.5833	.64
9258	1/16/2011 10:31:00 PM	93XX - External Problems	Area outage in Joseph.	Actual	Wallowa Falls	1/17/2011 12:53:00 AM		1.1	2.3667	2.6
9263	1/17/2011 08:53:00 PM	93XX - External Problems	Cause of trip, disturbance.	Actual	Wallowa Falls	1/17/2011 09:50:00 PM		1.1	.95	1.05
9574	2/27/2011 09:37:00 PM	70XX - Turbine	Cause of trip, high pressure pump shutdown.	Actual	Wallowa Falls	2/27/2011 11:45:00 PM		1.1	2.1333	2.35
9657	3/13/2011 01:55:00 PM	93XX - External Problems	Line restored, unit back on line.	Actual	Wallowa Falls	3/13/2011 04:15:00 PM		1.1	2.3333	2.57
9714	3/24/2011 03:24:00 AM	38XX - Auxiliary Systems	Pump on the hydraulic pressure unit has tripped thermals.	Actual	Wallowa Falls	3/24/2011 04:30:00 AM		1.1	1.1	1.21
9718	3/24/2011 11:25:00 AM	36XX - Electrical Systems	Unit off line, no other alarms.	Actual	Wallowa Falls	3/24/2011 03:10:00 PM		1.1	3.75	4.13
9725	3/25/2011 03:32:00 PM	36XX - Electrical Systems	Thermal ready for HPU.	Actual	Wallowa Falls	3/25/2011 04:00:00 PM		1.1	.4667	.51
9987	5/5/2011 12:39:00 PM	93XX - External Problems	Alarms set to normal. System frequency normal.	Actual	Wallowa Falls	5/5/2011 03:27:00 PM		1.1	2.8	3.08
10004	5/10/2011 05:11:00 AM	38XX - Auxiliary Systems	HPU motor has failed.	Actual	Wallowa Falls	5/10/2011 05:05:00 PM		1.1	11.9	13.09
10064	5/14/2011 07:27:00 PM	93XX - External Problems	Headgate appears to be closed, no water in tailrace. Walked tailrace to observe any fish stranding - no fish observed.	Actual	Wallowa Falls	5/16/2011 03:05:00 PM		1.1	43.6333	48.
10467	7/16/2011 06:06:00 PM	93XX - External Problems	Tripped offline - system disturbance.	Actual	Wallowa Falls	7/16/2011 07:00:00 PM		1.1	0.9	0.99
10509	7/21/2011 09:06:00 PM	93XX - External Problems	Tripped offline - line fuse trouble.	Actual	Wallowa Falls	7/21/2011 10:45:00 PM		1.1	1.65	1.815