
From: Koehler,Birgit G (BPA) - PG-5
Sent: Tuesday, May 31, 2022 5:17 PM
To: James,Eve A L (BPA) - PG-5; Bellcoff,Steve (BPA) - PGPR-5
Cc: Neuls,Esther T (BPA) - PGPR-5; Egerdahl,Ryan J (BPA) - PGPR-5
Subject: RE: LSR request for Birgit

Eve and I have been so heads-down focused on our presentation that I failed to say THANK YOU for the fast turn-around. Joel Cook will be hugely pleased to see these high numbers in the powerpoint. Very cool!

From: James,Eve A L (BPA) - PG-5 <eajames@bpa.gov>
Sent: Tuesday, May 31, 2022 4:42 PM
To: Bellcoff,Steve (BPA) - PGPR-5 <srbellcoff@bpa.gov>; Koehler,Birgit G (BPA) - PG-5 <bgkoehler@bpa.gov>
Cc: Neuls,Esther T (BPA) - PGPR-5 <etneuls@bpa.gov>; Egerdahl,Ryan J (BPA) - PGPR-5 <rjegerdahl@bpa.gov>
Subject: RE: LSR request for Birgit

Thanks- could you look at the top hour from more recent data. Maybe once fish operations happened on the projects so 1990 – 2021? I have some look back data that has a high value of 2955 MW- is there any data higher than that for that date range?

Thanks,
Eve

From: Bellcoff,Steve (BPA) - PGPR-5 <srbellcoff@bpa.gov>
Sent: Thursday, May 26, 2022 3:41 PM
To: Koehler,Birgit G (BPA) - PG-5 <bgkoehler@bpa.gov>; James,Eve A L (BPA) - PG-5 <eajames@bpa.gov>
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Subject: FW: LSR request for Birgit
Importance: High

Birgit/Eve

Below is some information that Esther pulled together after I had a conversation with Birgit across a wall (I know a strange concept these days ☺)
Related to the maximum single hour of generation..

Esther was able to pull historical hourly generation for the four Lower Snake dams from 4/20/1975 to 12/31/2021.

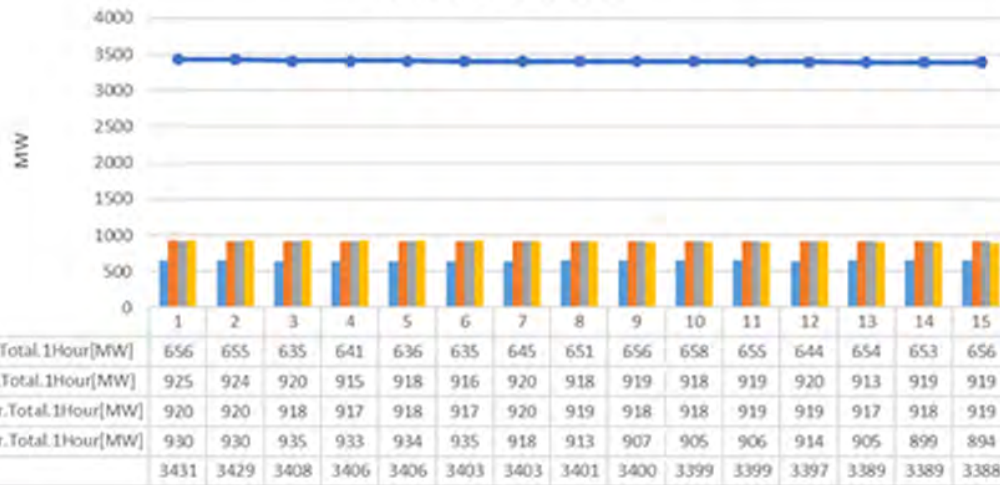
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- Data gathered from the publically accessible COE dataquery site
- All top 15 single hour generation came from March and April of 1982, data table also included below.

If we want to modify what data we are looking for, restrict to more recent years or specific months any combination can likely be pulled.

Top single hour generations details from individual LSR projects are also available below.

Lower Snake River Projects
Top 15 Single Hour Generations (MW)
04/20/1975 to 2021



Top 15-hour of **Total LSN** Generation

	Date Time	IHR.Power	LGS.Power	LMN.Power	LWG.Power	Total LSN
1	3/15/1982 16:00	656	925	920	930	3431
2	3/15/1982 17:00	655	924	920	930	3429
3	3/18/1982 19:00	635	920	918	935	3408
4	3/18/1982 16:00	641	915	917	933	3406
5	3/18/1982 17:00	636	918	918	934	3406
6	3/18/1982 18:00	635	916	917	935	3403
7	3/31/1982 17:00	645	920	920	918	3403
8	3/29/1982 16:00	651	918	919	913	3401
9	4/5/1982 17:00	656	919	918	907	3400
10	3/29/1982 17:00	658	918	918	905	3399
11	4/5/1982 16:00	655	919	919	906	3399
12	3/30/1982 17:00	644	920	919	914	3397
13	4/5/1982 15:00	654	913	917	905	3389
14	4/12/1982 17:00	653	919	918	899	3389
15	4/14/1982 3:00	656	919	919	894	3388

From: Koehler,Birgit G (BPA) - PG-5
Sent: Tuesday, May 31, 2022 5:10 PM
To: James,Eve A L (BPA) - PG-5
Subject: RE: LSR request for Birgit

Oh, I had missed that email from Steve (b)(6)
(b)(6)

Interesting that these were all 1982. Clearly no spill, and some are 3 hours. We can find a way to say that we have generated over 3,400 MW somewhere in our presentations. I'll try to look at them with a fresh eye in the morning.

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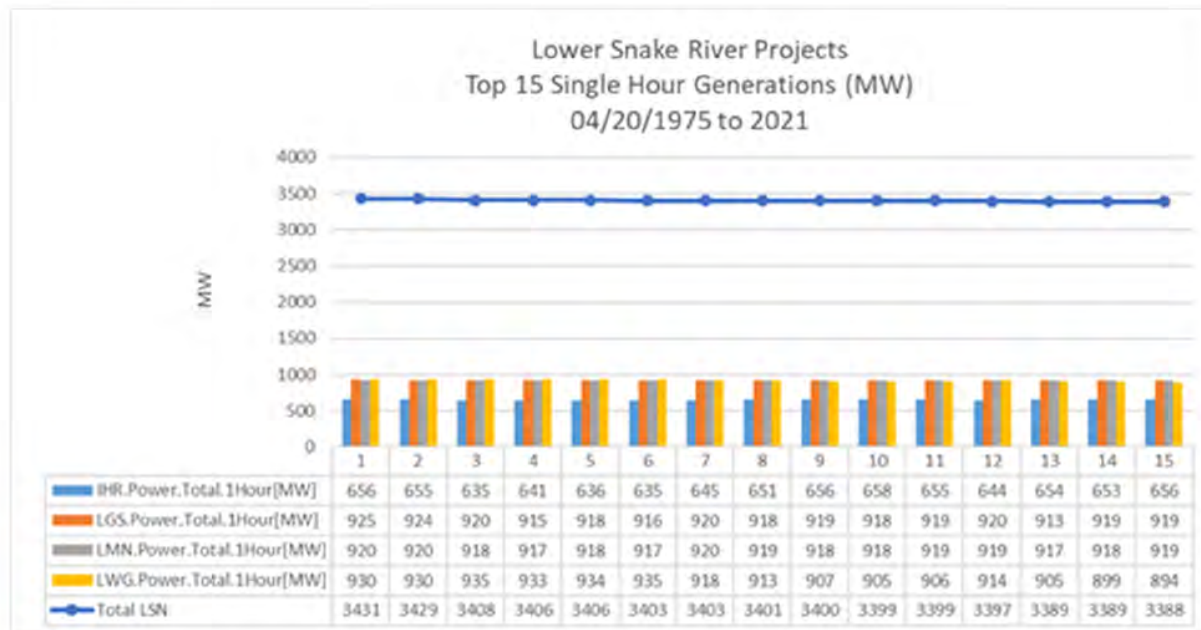
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From: James,Eve A L (BPA) - PG-5 <eajames@bpa.gov>

Sent: Wednesday, June 1, 2022 10:53 AM

To: Neuls,Esther T (BPA) - PGPR-5 <etneuls@bpa.gov>; Bellcoff,Steve (BPA) - PGPR-5 <srbellcoff@bpa.gov>; Koehler,Birgit G (BPA) - PG-5 <bgkoehler@bpa.gov>

Cc: Egerdahl,Ryan J (BPA) - PGPR-5 <riegerdahl@bpa.gov>

Subject: RE: LSR request for Birgit

Thanks Esther- I'm assuming the peak generation values on your chart occurred in March before spring spill but could you let me know if that assumption is correct? We are working on a slide responding to the NWECC study on the LSR replacement that just came out. Their data set is from 2006 – 2021. Could we use that same time period to determine the peak generation for Dec – Feb months? Thanks for all your help on this- honing this message before we share our results is very important ☺

From: Neuls,Esther T (BPA) - PGPR-5 <etneuls@bpa.gov>

Sent: Wednesday, June 1, 2022 7:21 AM

To: James,Eve A L (BPA) - PG-5 <eajames@bpa.gov>; Bellcoff,Steve (BPA) - PGPR-5 <srbellcoff@bpa.gov>; Koehler,Birgit G (BPA) - PG-5 <bgkoehler@bpa.gov>

Cc: Egerdahl,Ryan J (BPA) - PGPR-5 <riegerdahl@bpa.gov>

Subject: RE: LSR request for Birgit

Good morning!

Here are the top 15 highest single hourly generation from LSR from 1990-2021...

- All 15 highest hourly gen came from 1990 and 1991 late May to early June.
- There were 323 single hour generations \geq 2955 MW all happened prior to 2000, **except 2014 had several single hour gen that were $>$ 2955**. Also included below are single Max Hourly Gen of LSN from 1990-2021.

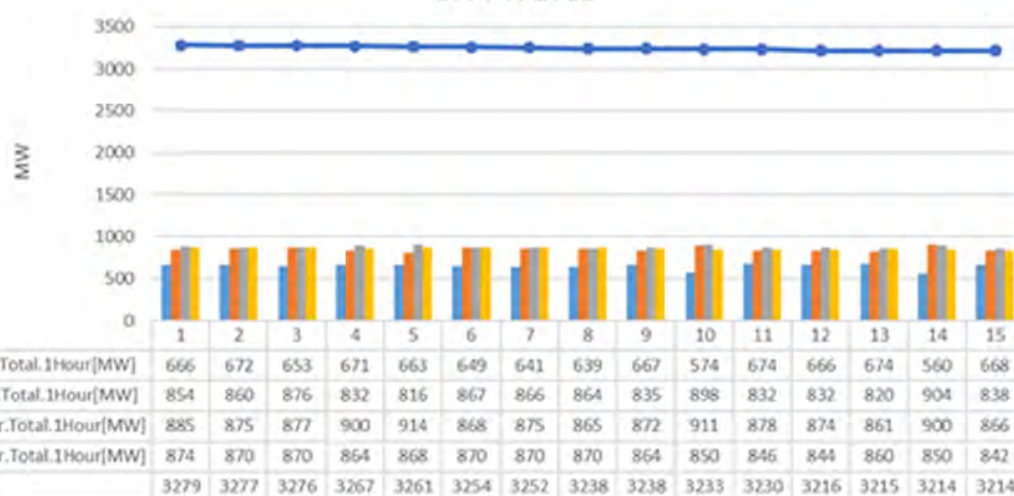
Please let me know if you have any questions or need anything additional. Also, I am happy to share the data file if you think it'll help speed up the investigation. It takes time to communicate back and forth, please just keep in mind that this is a big file with 46 years of hourly data.

I am happy to support in any way!

Have a great hump day!

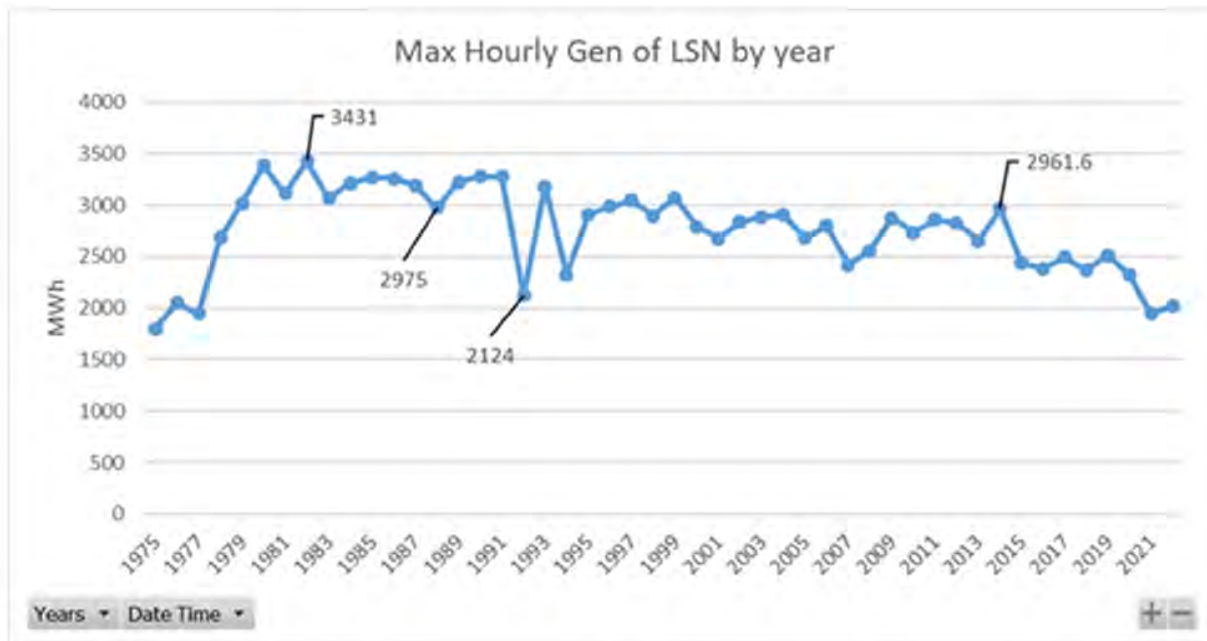
Esther

Lower Snake River Projects
Top 15 Single Hour Generations (MW)
1990 to 2021



Top 15-hour of **Total LSN** Generation 1990-2021

	Date Time	IHR.Power	LGS.Power	LMN.Power	LWG.Power	Total LSN
1	5/20/1991 14:00	666	854	885	874	3279
2	6/2/1990 15:00	672	860	875	870	3277
3	6/2/1990 16:00	653	876	877	870	3276
4	5/20/1991 17:00	671	832	900	864	3267
5	5/20/1991 0:00	663	816	914	868	3261
6	6/2/1990 18:00	649	867	868	870	3254
7	6/2/1990 17:00	641	866	875	870	3252
8	6/2/1990 19:00	639	864	865	870	3238
9	5/20/1991 15:00	667	835	872	864	3238
10	5/30/1990 14:00	574	898	911	850	3233
11	5/20/1991 16:00	674	832	878	846	3230
12	5/20/1991 18:00	666	832	874	844	3216
13	5/25/1991 23:00	674	820	861	860	3215
14	5/30/1990 15:00	560	904	900	850	3214
15	5/20/1991 19:00	668	838	866	842	3214



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