

## Data reference (DR)

# A Multi-Facility Two-Stage Stochastic Aggregate Production Planning Model with Renewable and Prosumer Microgrids

Sayed Rezwanul Islam<sup>a</sup>, Clara Novoa<sup>a,\*</sup>, Tongdan Jin<sup>a</sup>

<sup>a</sup>Ingram School of Engineering, Texas State University, San Marcos, TX 78666, USA

{\*Corresponding author: [cn17@txstate.edu](mailto:cn17@txstate.edu), phone: 1-512-245-1826, Fax1-512-245-7771}

**Table DR1.** Labor hours capacity at the factories in each production period and under each outcome

Month	Factory 1 (San Francisco)			Factory 2 (Austin)			Factory 3 (Boston)		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
1	46,004	46,102	46,314	46,104	46,274	46,465	46,201	46,379	46,560
2	46,011	46,140	46,325	46,105	46,280	46,467	46,220	46,420	46,588
3	46,015	46,141	46,326	46,113	46,317	46,489	46,227	46,435	46,590
4	46,043	46,147	46,400	46,129	46,333	46,497	46,227	46,450	46,602
5	46,054	46,156	46,408	46,151	46,339	46,501	46,266	46,483	46,613
6	46,058	46,166	46,424	46,154	46,371	46,513	46,276	46,487	46,615
7	46,063	46,191	46,448	46,165	46,377	46,518	46,289	46,508	46,635
8	46,064	46,215	46,453	46,198	46,385	46,555	46,300	46,521	46,652
9	46,068	46,244	46,472	46,213	46,386	46,556	46,320	46,523	46,667
10	46,079	46,264	46,488	46,230	46,387	46,558	46,336	46,524	46,682
11	46,096	46,265	46,489	46,253	46,401	46,570	46,339	46,540	46,696
12	46,102	46,307	46,492	46,273	46,423	46,587	46,346	46,551	46,696

**Table DR2. Machine hours capacity at the factories in each period and under each outcome**

Month	Factory 1 (San Francisco)			Factory 2 (Austin)			Factory 3 (Boston)		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
1	150,633	152,856	155,997	150,011	150,264	150,483	151,046	153,722	156,276
2	150,972	153,353	156,221	150,018	150,285	150,515	151,567	153,848	156,468
3	151,071	153,815	156,840	150,079	150,287	150,520	151,859	154,173	156,820
4	151,233	153,856	157,049	150,091	150,300	150,562	151,917	154,370	157,397
5	151,621	155,137	157,569	150,113	150,329	150,597	151,940	154,551	157,404
6	151,751	155,153	157,585	150,126	150,348	150,612	151,983	154,911	157,488
7	151,809	155,287	157,766	150,129	150,353	150,667	152,143	155,370	157,947
8	151,898	155,300	158,250	150,139	150,400	150,835	152,406	155,485	158,928
9	152,088	155,577	158,395	150,182	150,406	150,874	152,439	155,541	159,102
10	152,277	155,650	158,421	150,217	150,440	150,913	152,467	155,643	159,388
11	152,713	155,667	158,996	150,220	150,443	150,917	152,474	155,778	159,845
12	152,678	155,715	159,258	150,235	150,450	150,977	153,685	155,781	160,421

**Table DR3.** Demands for the products in each period and under each outcome

Month	Factory 1 (San Francisco)				Factory 2 (Austin)				Factory 3 (Boston)			
	Product A		Product B		Product A		Product B		Product A		Product B	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
1	504	656	764	892	455	514	751	795	557	649	766	842
2	509	694	753	889	460	515	742	791	560	657	748	827
3	520	707	751	870	461	515	737	789	566	659	740	821
4	531	731	735	866	462	528	732	779	580	666	716	820
5	549	735	730	859	463	530	731	777	584	694	689	814
6	573	738	729	853	484	532	725	777	594	696	688	803
7	582	741	726	832	488	534	720	775	608	722	686	796
8	583	760	706	810	490	535	719	772	629	740	680	792
9	594	776	689	796	503	544	714	771	631	741	673	780
10	605	793	670	787	512	547	714	761	635	745	672	779
11	629	795	622	782	513	548	712	754	640	748	669	775
12	653	799	603	766	514	548	710	752	643	749	665	773

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